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ABSTRACT

This glossary was designed to help explain the more commonly used environmental terms which appear in Environmental Protection Agency (EPA) publications, news releases and other agency documents available to the public. These terms were selected to give a general sense of what a term or phrase means in relatively non-technical language. The terms came from previous lists, internal glossaries, and suggestions made by agency groups. Chemicals and pesticides frequently referred to in agency publications have been included. The definitions and information supplied do not necessarily constitute the official definitions used for regulatory purposes by the EPA. Also included is a list of acronyms used by the EPA and referred to in their publications. (CW)

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Glossary of Environmental Terms and Acronym List

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Introduction

This glossary of environmental terms and acronym list replaces "Common Environmental Terms," published by the Environmental Protection Agency in 1974 and revised in 1978. It is designed to give the user an explanation of the more commonly used environmental terms appearing in EPA publications, news releases and other Agency documents available to the general public, students, the news media, and Agency employees. The terms and definitions in this publication were selected to give the user a general sense of what a term or phrase means in relatively non-technical language, although it was obviously necessary to use some scientific terminology.

The terms selected for inclusion came from previously published lists, internal glossaries produced by various programs, and specific suggestions made by many Agency programs and offices. The chemicals and pesticides selected for inclusion were those most frequently referred to in Agency publications or which are the subject of major EPA regulatory or program activities.

Definitions or information about substances or program activities not included in this glossary may be found in EPA libraries or scientific/technical reference documents or may be obtained from the various program offices.

The definitions do not constitute the Agency's official use of terms and phrases for regulatory purposes. Nothing in this document should be construed to in any way alter or supplant any other federal document. Official terminology may be found in the laws and related regulations as published in such sources as the Congressional Record and the Federal Register.

Users with suggestions for future editions should write to the Publications Division, Office of Public Affairs, A-107, USEPA Washington DC, 20460.

A

Abatement: Reducing the degree or intensity of, or eliminating, pollution.

Abandoned Well: A well whose use has been permanently discontinued or which is in a state of disrepair such that it cannot be used for its intended purpose.

ABEL: EPA's computer model for analyzing a violator's ability to pay a civil penalty.

Absorption: The passage of one substance into or through another; e.g., an operation in which one or more soluble components of a gas mixture are dissolved in a liquid.

Accelerator: In radiation science, a device that speeds up charged particles such as electrons or protons.

Accident Site: The location of an unexpected occurrence, failure or loss, either at a plant or along a transportation route, resulting in a release of hazardous materials.

Acclimatization: The physiological and behavioral adjustments of an organism to changes in its environment.

Acetylcholine: A substance in the human body having important neurotransmitter effects on various internal systems; often used as a bronchoconstrictor.

Acid Deposition: A complex chemical and atmospheric phenomenon that occurs when emissions of sulfur and nitrogen compounds and other substances are transformed by chemical processes in the atmosphere, often far from the original sources, and then deposited on earth in either a wet or dry form. The wet forms, popularly called "acid rain," can fall as rain, snow, or fog. The dry forms are acidic gases or particulates.

Acid Rain: (See: acid deposition)

Action Levels: 1. Regulatory levels recommended by EPA for enforcement by FDA and USDA when pesticide residues occur in food or feed commodities for reasons other than the direct application of the pesticide. As opposed to "tolerances" which are established for residues occurring as a direct result of proper usage, action levels are set for inadvertent residues resulting from previous legal use or accidental contamination. 2. In the Superfund program, the existence of a contaminant concentration in the environment high enough to warrant action or trigger a response under SARA and the National Oil and Hazardous Substances Contingency Plan. The term can be used similarly in other regulatory programs. (See: tolerances.)

Activated Carbon: A highly adsorbent form of carbon used to remove odors and toxic substances from liquid or gaseous emissions. In waste treatment it is used to remove dissolved organic matter from waste water. It is also used in motor vehicle evaporative control systems.

Activated Sludge: Sludge that results when primary effluent is mixed with bacteria-laden sludge and then agitated and aerated to promote biological treatment. This speeds breakdown of organic matter in raw sewage undergoing secondary waste treatment.

Active Ingredient: In any pesticide product, the component which kills, or otherwise controls, target pests. Pesticides are regulated primarily on the basis of active ingredients.

Acute Exposure: A single exposure to a toxic substance which results in severe biological harm or death. Acute exposures are usually characterized as lasting no longer than a day.

Acute Toxicity: The ability of a substance to cause poisonous effects resulting in severe biological harm or death soon after a single exposure or dose. Also, any severe poisonous effect resulting from a single short-term exposure to a toxic substance. (See: chronic toxicity, toxicity.)

Adaptation: Changes in an organism's structure or habit that help it adjust to its surroundings.

Add-on Control Device: An air pollution control device such as carbon adsorber or incinerator which reduces the pollution in an exhaust gas. The control device usually does not affect the process being controlled and thus is "add-on" technology as opposed to a scheme to control pollution through making some alteration to the basic process.

Adhesion: Molecular attraction which holds the surfaces of two substances in contact.

Administrative Order: A legal document signed by EPA directing an individual, business, or other entity to take corrective action or refrain from an activity. It describes the violations and actions to be taken, and can be enforced in court. Such orders may be issued, for example, as a result of an administrative complaint whereby the respondent is ordered to pay a penalty for violations of a statute.

Administrative Order On Consent: A legal agreement signed by EPA and an individual, business, or other entity through which the violator agrees to pay for correction of violations, take the required corrective or cleanup actions, or refrain from an activity. It describes the actions to be taken, may be subject to a comment period, applies to civil actions, and can be enforced in court.

Administrative Procedures Act: A law that spells out procedures and requirements related to the promulgation of regulations.

Adsorption: 1. Adhesion of molecules of gas, liquid, or dissolved solids to a surface. 2. An advanced method of treating wastes in which activated carbon removes organic matter from wastewater.

Adulterants: Chemical impurities or substances that by law do not belong in a food, or in a pesticide.

Advanced Waste Water Treatment: Any treatment of sewage that goes beyond the secondary or biological water treatment stage and includes the removal of nutrients such as phosphorus and nitrogen and a high percentage of suspended solids. (See primary, secondary treatment.)

Advisory: A non-regulatory document that communicates risk information to persons who may have to make risk management decisions.

Aeration: A process which promotes biological degradation of organic water. The process may be passive (as when waste is exposed to air), or active (as when a mixing or bubbling device introduces the air).

Aeration Tank: A chamber used to inject air into water.

Aerobic: Life or processes that require, or are not destroyed by, the presence of oxygen. (See: anaerobic.)

Aerobic Treatment: Process by which microbes decompose complex organic compounds in the presence of oxygen and use the liberated energy for reproduction and growth. Types of aerobic processes include extended aeration, trickling filtration, and rotating biological contactors.

Aerosol: A suspension of liquid or solid particles in a gas.

Afterburner: In incinerator technology, a burner located so that the combustion gases are made to pass through its flame in order to remove smoke and odors. It may be attached to or be separated from the incinerator proper.

Agent Orange: A toxic herbicide and defoliant which was used in the Vietnam conflict. It contains 2,4,5-trichlorophenoxyacitic acid (2,4,5-T) and 2-4 dichlorophenoxyacetic acid (2,4-D) with trace amounts of dioxin.

Agglomeration: The process by which precipitation particles grow larger by collision or contact with cloud particles or other precipitation particles.

Agglutination: The process of uniting solid particles coated with a thin layer of adhesive material or of arresting solid particles by impact on a surface coated with an adhesive.

Agricultural Pollution: The liquid and solid wastes from farming, including: runoff and leaching of pesticides and fertilizers; erosion and dust from plowing; animal manure and carcasses; crop residues, and debris.

Airborne Particulates: Total suspended particulate matter found in the atmosphere as solid particles or liquid droplets. Chemical composition of particulates varies widely, depending on location and time of year. Airborne particulates include: windblown dust, emissions from industrial processes, smoke from the burning of wood and coal, and the exhaust of motor vehicles.

Airborne Release: Release of any chemical into the air.

Air Changes Per Hour (ACH): The movement of a volume of air in a given period of time; if a house has one air change per hour, it means that all of the air in the house will be replaced in a one-hour period.

Air Contaminant: Any particulate matter, gas, or combination thereof, other than water vapor or natural air. (See: air pollutant.)

Air Curtain: A method of containing oil spills. Air bubbling through a perforated pipe causes an upward water flow that slows the spread of oil. It can also be used to stop fish from entering polluted water.

Air Mass: A widespread body of air that gains certain meteorological or polluted characteristics—e.g., a heat inversion or smogginess—while set in one location. The characteristics can change as it moves away.

Air Monitoring: (See: monitoring)

Air Pollutant: Any substance in air which could, if in high enough concentration, harm man, other animals, vegetation, or material. Pollutants may include almost any natural or artificial composition of matter capable of being airborne. They may be in the form of solid particles, liquid droplets, gases, or in combinations of these forms. Generally, they fall into two main groups: (1) those emitted directly from identifiable sources and (2) those produced in the air by interaction between two or more primary pollutants, or by reaction with normal atmospheric constituents, with or without photoactivation. Exclusive of pollen, fog, and dust, which are of natural origin, about 100 contaminants

have been identified and fall into the following categories: solids, sulfur compounds, volatile organic chemicals, nitrogen compounds, oxygen compounds, halogen compounds, radioactive compounds, and odors.

Air Pollution: The presence of contaminant or pollutant substances in the air that do not disperse properly and interfere with human health or welfare, or produce other harmful environmental effects.

Air Pollution Episode: A period of abnormally high concentration of air pollutants, often due to low winds and temperature inversion, that can cause illness and death. (See: episode, pollution.)

Air Quality Control Region: An area—designated by the federal government—in which communities share a common air pollution problem. Sometimes several states are involved.

Air Quality Criteria: The levels of pollution and lengths of exposure above which adverse health and welfare effects may occur.

Air Quality Standards: The level of pollutants prescribed by regulations that may not be exceeded during a specified time in a defined area.

Alachlor: A herbicide, marketed under the trade name Lasso, used mainly to control weeds in corn and soybean fields.

Alar: Trade name for daminozide, a pesticide that makes apples redder, firmer, and less likely to drop off trees before growers are ready to pick them. It is also used to a lesser extent on peanuts, tart cherries, concord grapes, and other fruits.

Aldicarb: An insecticide sold under the trade name Temik. It is made from ethyl isocyanate.

Algae: Simple rootless plants that grow in sunlit waters in relative proportion to the amounts of nutrients available. They can affect water quality adversely by lowering the dissolved oxygen in the water. They are food for fish and small aquatic animals.

Algal Blooms: Sudden spurts of algal growth, which can affect water quality adversely and indicate potentially hazardous changes in local water chemistry.

Alpha Particle: A positively charged particle composed of 2 neutrons and 2 protons released by some atoms undergoing radioactive decay. The particle is identical to the nucleus of a helium atom.

Alternate Method: Any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated in specific cases to EPA's satisfaction to produce results adequate for compliance..

Ambient Air: Any unconfined portion of the atmosphere: open air, surrounding air.

Ambient Air Quality Standards: (See: Criteria Pollutants and National Ambient Air Quality Standards)

Anadromous: Fish that spend their adult life in the sea but swim upriver to fresh-water spawning grounds to reproduce.

Anaerobic: A life or process that occurs in, or is not destroyed by, the absence of oxygen.

Antagonism: The interaction of two chemicals having an opposing, or neutralizing effect on each other, or—given some specific biological effect—a chemical interaction that appears to have an opposing or neutralizing effect over what might otherwise be expected.

Antarctic "Ozone Hole": Refers to the seasonal depletion of ozone in a large area over Antarctica.

Antibodies: Proteins produced in the body by immune system cells in response to antigens, and capable of combining with antigens.

Anti-Degradation Clause: Part of federal air quality and water quality requirements prohibiting deterioration where pollution levels are above the legal limit.

Antigen: A substance that causes production of antibodies when introduced into animal or human tissue.

Aquifer: An underground geological formation, or group of formations, containing usable amounts of groundwater that can supply wells and springs.

Arbitration: A process for the resolution of disputes. Decisions are made by an impartial arbitrator selected by the parties. These decisions are usually legally binding. (See: mediation.)

Area of Review: In the UIC program, the area surrounding an injection well that is reviewed during the permitting process to determine whether the injection operation will induce flow between aquifers.

Area Source: Any small source of non-natural air pollution that is released over a relatively small area but which cannot be classified as a point source. Such sources may include vehicles and other small fuel combustion engines.

Asbestosis: A disease associated with chronic exposure to and inhalation of asbestos fibers. The disease makes breathing progressively more difficult and can lead to death.

Asbestos: A mineral fiber that can pollute air or water and cause cancer or asbestosis when inhaled. EPA has banned or severely restricted its use in manufacturing and construction.

Ash: The mineral content of a product remaining after complete combustion.

A-Scale Sound Level: A measurement of sound approximating the sensitivity of the human ear, used to note the intensity or annoyance of sounds.

Assimilation: The ability of a body of water to purify itself of pollutants.

Atmosphere [an]: A standard unit of pressure representing the pressure exerted by a 29.92-inch column of mercury at sea level at 45° latitude and equal to 1000 grams per square centimeter. (the) The whole mass of air surrounding the earth, composed largely of oxygen and nitrogen.

Atomize: To divide a liquid into extremely minute particles, either by impact with a jet of steam or compressed air, or by passage through some mechanical device.

Attainment Area: An area considered to have air quality as good as or better than the national ambient air quality standards as defined in the Clean Air Act. An area may be an attainment area for one pollutant and a non-attainment area for others.

Attenuation: The process by which a compound is reduced in concentration over time, through adsorption, degradation, dilution, and/or transformation.

Attractant: A chemical or agent that lures insects or other pests by stimulating their sense of smell.

Attrition: Wearing or grinding down of a substance by friction. A contributing factor in air pollution, as with dust.

Autotrophic: An organism that produces food from inorganic substances.

B

Background Level: In air pollution control, the concentration of air pollutants in a definite area during a fixed period of time prior to the starting up or on the stoppage of a source of emission under control. In toxic substances monitoring, the average presence in the environment, originally referring to naturally occurring phenomena.

BACT—Best Available Control Technology: A emission limitation based on the maximum degree of emission reduction which (considering energy, environmental, and economic impacts and other costs) is achievable through application of production processes and available methods, systems, and techniques. In no event does BACT permit emissions in excess of those allowed under any applicable Clean Air Act provisions. Use of the BACT concept is allowable on a case by case basis for major new or modified emissions sources in attainment areas and applies to each regulated pollutant.

Bacteria: (Singular: bacterium) Microscopic living organisms which can aid in pollution control by consuming or breaking down organic matter in sewage. or by similarly acting on oil spills or other water pollutants. Bacteria in soil, water or air can also cause human, animal and plant health problems.

Baffle Chamber: In incinerator design, a chamber designed to promote the settling of fly ash and coarse particulate matter by changing the direction and/or reducing the velocity of the gases produced by the combustion of the refuse or sludge.

Baghouse Filter: Large fabric bag, usually made of glass fibers, used to eliminate intermediate and large (greater than 20 microns in diameter) particles. This device operates in a way similar to the bag of an electric vacuum cleaner, passing the air and smaller particulate matter, while entrapping the larger particulates.

Baling: Compacting solid waste into blocks to reduce volume and simplify handling.

Ballistic Separator: A machine that sorts organic from inorganic matter for composting.

Band Application: In pesticides, the spreading of chemicals over, or next to, each row of plants in a field.

Banking: A system for recording qualified air emission reductions for later use in bubble, offset, or netting transactions. (See: emissions trading.)

Bar Screen: In wastewater treatment, a device used to remove large solids.

Barrier Coating(s): A layer of a material that acts to obstruct or prevent passage of something through a surface that is to be protected, e.g. grout, caulk, or various sealing compounds; sometimes used with polyurethane membranes to prevent corrosion or oxidation of metal surfaces, chemical impacts on various materials, or, for example, to prevent soil-gas-borne radon from moving through walls, cracks, or joints in a house.

Basal Application: In pesticides, the application of a chemical on plant stems or tree trunks just above the soil line.

BEN: EPA's computer model for analyzing a violator's economic gain from not complying with the law.

Benthic Organism (Benthos): A form of aquatic plant or animal life that is found on or near the bottom of a stream, lake or ocean.

Benthic Region: The bottom layer of a body of water.

Beryllium: An airborne metal that can be hazardous to human health when inhaled. It is discharged by machine shops, ceramic and propellant plants, and foundries.

Beta Particle: An elementary particle emitted by radioactive decay, that may cause skin burns. It is halted by a thin sheet of paper.

Bioaccumulative: Substances that increase in concentration in living organisms (that are very slowly metabolized or excreted) as they breathe contaminated air, drink contaminated water, or eat contaminated food. (See: biological magnification.)

Bioassay: Using living organisms to measure the effect of a substance, factor, or condition by comparing before-and-after data. Term is often used to mean cancer bioassays.

Biochemical Oxygen Demand (BOD): A measure of the amount of oxygen consumed in the biological processes that break down organic matter in water. The greater the BOD, the greater the degree of pollution.

Biodegradable: The ability to break down or decompose rapidly under natural conditions and processes.

Biological Control: In pest control, the use of animals and organisms that eat or otherwise kill or out-compete pests.

Biological Magnification: Refers to the process whereby certain substances such as pesticides or heavy metals move up the food chain, work their way into a river or lake and are eaten by aquatic organisms such as fish which in turn are eaten by large birds, animals or humans. The substances become concentrated in tissues or internal organs as they move up the chain. (See: bioaccumulative.)

Biological Oxidation: The way bacteria and microorganisms feed on and decompose complex organic materials. Used in self-purification of water bodies and in activated sludge wastewater treatment.

Biological Treatment: A treatment technology that uses bacteria to consume waste. This treatment breaks down organic materials.

Biomass: All of the living material in a given area; often refers to vegetation. Also called "biota".

Biomonitoring: 1. The use of living organisms to test the suitability of effluents for discharge into receiving waters and to test the quality of such waters downstream from the discharge. 2. Analysis of blood, urine, tissues, etc., to measure chemical exposure in humans.

Biosphere: The portion of Earth and its atmosphere that can support life.

Biostabilizer: A machine that converts solid waste into compost by grinding and aeration.

Biota: (See: biomass.)

Biotechnology: Techniques that use living organisms or parts of organisms to produce a variety of products (from medicines to industrial enzymes) to improve plants or animals or to develop microorganisms for specific uses such as removing toxics from bodies of water, or as pesticides.

Biotic Community: A naturally occurring assemblage of plants and animals that live in the same environment and are mutually sustaining and interdependent.

Black Lung: A disease of the lungs caused by habitual inhalation of coal dust.

Blackwater: Water that contains animal, human, or food wastes.

Bloom: A proliferation of algae and/or higher aquatic plants in a body of water; often related to pollution, especially when pollutants accelerate growth.

BOD5: The amount of dissolved oxygen consumed in five days by biological processes breaking down organic matter.

Bog: A type of wetland that accumulates appreciable peat deposits. Bogs depend primarily on precipitation for their water source, are usually acidic and rich in plant residue with a conspicuous mat of living green moss.

Boom: 1. A floating device used to contain oil on a body of water. 2. A piece of equipment used to apply pesticides from ground equipment such as a tractor or truck. (See: sonic boom.)

Botanical Pesticide: A pesticide whose active ingredient is a plant produced chemical such as nicotine or strychnine.

Bottle Bill: Proposed or enacted legislation which requires a returnable deposit on beer or soda containers and provides for retail store or other redemption centers. Such legislation is designed to discourage use of throw-away containers.

Bottom Land Hardwoods: Forested freshwater wetlands adjacent to rivers in the southeastern United States. They are especially valuable for wildlife breeding and nesting and habitat areas.

Brackish Water: A mixture of fresh and salt water.

Broadcast Application: In pesticides, the spreading of chemicals over an entire area.

Bubble: A system under which existing emissions sources can propose alternate means to comply with a set of emissions limitations; under the bubble concept, sources can control more than required at one emission point where control costs are relatively low in return for a comparable relaxation of controls at a second emission point where costs are higher.

Bubble Policy: (See: emissions trading.)

Buffer Strips: Strips of grass or other erosion-resisting vegetation between or below cultivated strips or fields.

Burial Ground (Graveyard): A disposal site for radioactive waste materials that uses earth or water as a shield.

By-product: Material, other than the principal product, that is generated as a consequence of an industrial process.

C

Cadmium (CD): A heavy metal element that accumulates in the environment.

Cancellation: Refers to Section 6 (b) of the the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) which authorizes cancellation of a pesticide registration if unreasonable adverse effects to the environment and public health develop when a product is used according to widespread and commonly recognized practice, or if its labeling or other material required to be submitted does not comply with FIFRA provisions.

Cap: A layer of clay, or other highly impermeable material installed over the top of a closed landfill to prevent entry of rainwater and minimize production of leachate.

Capture Efficiency: The fraction of all organic vapors generated by a process that are directed to an abatement or recovery device.

Carbon Adsorber: An add-on control device which uses activated carbon to absorb volatile organic compounds from a gas stream. The VOCs are later recovered from the carbon.

Carbon Dioxide (CO2): A colorless, odorless, non-poisonous gas, which results from fossil fuel combustion and is normally a part of the ambient air.

Carbon Monoxide (CO): A colorless, odorless, poisonous gas produced by incomplete fossil fuel combustion.

Carboxyhemoglobin: Hemoglobin in which the iron is associated with carbon monoxide (CO). The affinity of hemoglobin for CO is about 300 times greater than for oxygen.

Carcinogen: Any substance that can cause or contribute to the production of cancer.

Carcinogenic: Cancer-producing.

Carrying Capacity: 1. In recreation management, the amount of use a recreation area can sustain without deterioration of its quality. 2. In wildlife management, the maximum number of animals an area can support during a given period of the year.

Cask: A thick-walled container (usually lead) used to transport radioactive material. Also called a coffin.

Catanadramous: Fish that swim downstream to spawn.

Catalytic Converter: An air pollution abatement device that removes pollutants from motor vehicle exhaust, either by oxidizing them into carbon dioxide and water or reducing them to nitrogen and oxygen.

Catalytic Incinerator: A control device which oxidizes volatile organic compounds (VOCs) by using a catalyst to promote the combustion process. Catalytic incinerators require lower temperatures than conventional thermal incinerators, with resultant fuel and cost savings.

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Categorical Exclusion: A class of actions which either individually or cumulatively would not have a significant effect on the human environment and therefore would not require preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act (NEPA).

Categorical Pretreatment Standard: A technology-based effluent limitation for an industrial facility which discharges into a municipal sewer system. Analogous in stringency to Best Availability Technology (BAT) for direct dischargers.

Cathodic Protection: A technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell.

Caustic Soda: Sodium hydroxide, a strong alkaline substance used as the cleaning agent in some detergents.

CBOD5: The amount of dissolved oxygen consumed in 5 days from the carbonaceous portion of biological processes breaking down in an effluent. The test methodology is the same as for BOD5, except that nitrogen demand is suppressed.

Cells: 1.In solid waste disposal, holes where waste is dumped, compacted, and covered with layers of dirt on a daily basis. 2. The smallest structural part of living matter capable of functioning as an independent unit.

Centrifugal Collector: A mechanical system using centrifugal force to remove aerosols from a gas stream or to de-water sludge.

Cesium (Cs): A silver-white, soft ductile element of the alkali metal group that is the most electropositive element known. Used especially in photoelectric cells.

Channelization: Straightening and deepening streams so water will move faster, a flood-reduction or marsh-drainage tactic that can interfere with waste assimilation capacity and disturb fish and wildlife habitats.

Characteristic: Any one of the four categories used in defining hazardous waste: ignitability, corrosivity, reactivity, and toxicity.

Chemical Oxygen Demand (COD): A measure of the oxygen required to oxidize all compounds in water, both organic and inorganic.

Chemical Treatment: Any one of a variety of technologies that use chemicals or a variety of chemical processes to treat waste.

Chemosterilant: A chemical that controls pests by preventing reproduction.

Chilling Effect: The lowering of the Earth's temperature because of increased particles in the air blocking the sun's rays. (See: greenhouse effect.)

Chlorinated Hydrocarbons: These include a class of persistent, broad-spectrum insecticides, that linger in the environment and accumulate in the food chain. Among them are DDT, aldrin, dieldrin, heptachlor, chlordane, lindane, endrin, mirex, hexachloride, and toxaphene. Other examples include TCE, used as an industrial solvent.

Chlorinated Solvent: An organic solvent containing chlorine atoms, e.g., methylene chloride and 1,1,1-trichloromethane which are used in aerosol spray containers and in traffic paint.

Chlorination: The application of chlorine to drinking water, sewage, or industrial waste to disinfect or to oxidize undesirable compounds.

Chlorinator: A device that adds chlorine, in gas or liquid form, to water or sewage to kill infectious bacteria.

Chlorine-Contact Chamber: That part of a water treatment plant where effluent is disinfected by chlorine.

Chlorofluorocarbons (CFCs): A family of inert, nontoxic, and easily liquified chemicals used in refrigeration, air conditioning, packaging, insulation, or as solvents and aerosol propellants. Because CFCs are not destroyed in the lower atmosphere they drift into the upper atmosphere where their chlorine components destroy ozone.

Chlorosis: Discoloration of normally green plant parts, that can be caused by disease, lack of nutrients, or various air pollutants.

Chromium: (See: heavy metals.)

Chronic Toxicity: The capacity of a substance to cause long-term poisonous human health effects. (See: acute toxicity.)

Clarification: Clearing action that occurs during wastewater treatment when solids settle out. This is often aided by centrifugal action and chemically induced coagulation in wastewater.

Clarifier: A tank in which solids are settled to the bottom and are subsequently removed as sludge.

Cleanup: Actions taken to deal with a release or threat of release of a hazardous substance that could affect humans and/or the environment. The term "cleanup" is sometimes used interchangeably with the terms remedial action, removal action, response action, or corrective action.

Clear Cut: A forest management technique that involves harvesting all the trees in one area at one time. Under certain soil and slope conditions it can contribute sediment to water pollution.

Cloning: In biotechnology, obtaining a group of genetically identical cells from a single cell. This term has assumed a more general meaning that includes making copies of a gene.

Closed-Loop Recycling: Reclaiming or reusing wastewater for non-potable purposes in an enclosed process.

Coagulation: A clumping of particles in wastewater to settle out impurities. It is often induced by chemicals such as lime, alum, and iron salts.

Coastal Zone: Lands and waters adjacent to the coast that exert an influence on the uses of the sea and its ecology, or, inversely, whose uses and ecology are affected by the sea.

Coefficient of Haze (COH): A measurement of visibility interference in the atmosphere.

Coliform Index: A rating of the purity of water based on a count of fecal bacteria.

Coliform Organism: Microorganisms found in the intestinal tract of humans and animals. Their presence in water indicates fecal pollution and potentially dangerous bacterial contamination by disease-causing microorganisms.

Combined Sewers: A sewer system that carries both sewage and storm-water runoff. Normally, its entire flow goes to a waste treatment plant, but during a heavy storm, the storm water volume may be so great as to cause overflows. When this happens untreated mixtures of storm water and sewage may flow into receiving waters. Storm-water runoff may also carry toxic chemicals from industrial areas or streets into the sewer system.

Combustion: Burning, or rapid oxidation, accompanied by release of energy in the form of heat and light. A basic cause of air pollution.

Combustion Product: Substance produced during the burning or oxidation of a material.

Command Post: Facility located at a safe distance upwind from an accident site, where the on-scene coordinator, response and technical representatives can make response decisions, deploy manpower and equipment, maintain liaison with news media, and handle communications.

Comment Period: Time provided for the public to review and comment on a proposed EPA action or rulemaking after it is published in the Federal Register.

Comminution: Mechanical shredding or pulverizing of waste. Used in both solid waste management and wastewater treatment.

Comminuter: A machine that shreds or pulverizes solids to make waste treatment easier.

Community Relations: The EPA effort to establish two-way communication with the public to create understanding of EPA programs and related actions, to assure public input into decision-making processes related to affected communities, and to make certain that the Agency is aware of and responsive to public concerns. Specific community relations activities are required in relation to Superfund remedial actions.

Community Water System: A public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

Compaction: Reduction of the bulk of solid waste by rolling and tamping.

Compliance Coating: A coating whose volatile organic compound content does not exceed that allowed by regulation.

Compliance Schedule: A negotiated agreement between a pollution source and a government agency that specifies dates and procedures by which a source will reduce emissions and, thereby, comply with a regulation.

Compost: A mixture of garbage and degradable trash with soil in which certain bacteria in the soil break down the garbage and trash into organic fertilizer.

Composting: The natural biological decomposition of organic material in the presence of air to form a humus-like material. Controlled methods of composting include mechanical mixing and aerating, ventilating the materials by dropping them through a vertical series of aerated chambers, or placing the compost in piles out in the open air and mixing it or turning it periodically.

Conditional Registration: Under special circumstances, the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) permits registration of pesticide products that is "conditional" upon the submission of additional data. These special circumstances include a finding by the EPA Administrator that a new product or use of an existing pesticide will not significantly increase the risk of unreasonable adverse effects. A product containing a new (previously unregistered) active ingredient may be conditionally registered only if the Administrator finds that such conditional registration is in the public interest, that a reasonable time for conducting the additional studies has not elapsed, and the use of the pesticide for the period of conditional registration will not present an unreasonable risk.

Confined Aquifer: An aquifer in which ground water is confined under pressure which is significantly greater than atmospheric pressure.

Consent Decree: A legal document, approved by a judge, that formalizes an agreement reached between EPA and potentially responsible parties (PRPs) through which PRPs will conduct all or part of a cleanup action at a Superfund site; cease or correct actions or processes that are polluting the environment; or otherwise comply with regulations where the PRP's failure to comply caused EPA to initiate regulatory enforcement actions. The consent decree describes the actions PRP's will take and may be subject to a public comment period.

Conservation: Avoiding waste of, and renewing when possible, human and natural resources. The protection, improvement, and use of natural resources according to principles that will assure their highest economic or social benefits.

Contact Pesticide: A chemical that kills pests when it touches them, rather than by being eaten (stomach poison). Also, soil that contains the minute skeletons of certain algae that scratches and dehydrates waxy-coated insects.

Contaminant: Any physical, chemical, biological, or radiological substance or matter that has an adverse affect on air, water, or soil.

Contingency Plan: A document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or other accident that releases toxic chemicals, hazardous wastes, or radioactive materials which threaten human health or the environment. (See: National Oil and Hazardous Substances Contingency Plan.)

Contract Labs: Laboratories under contract to EPA, which analyze samples taken from wastes, soil, air, and water or carry out research projects.

Contrails: Long, narrow clouds caused when high-flying jet aircraft disturb the atmosphere.

Contour Plowing: Farming methods that break ground following the shape of the land in a way that discourages erosion.

Control Technique Guidelines (CTG): A series of EPA documents designed to assist states in defining reasonable available control technology (RACT) for major sources of volatile organic compounds (VOC).

Conventional Pollutants: Statutorily listed pollutants which are understood well by scientists. These may be in the form of organic waste, sediment, acid, bacteria and viruses, nutrients, oil and grease, or heat.

Conventional Systems: Systems that have been traditionally used to collect municipal wastewater in gravity sewers and convey it to a central primary or secondary treatment plant prior to discharge to surface waters.

Coolant: A liquid or gas used to reduce the heat generated by power production in nuclear reactors, electric generators, various industrial and mechanical processes, and automobile engines.

Cooling Tower: A structure that helps remove heat from water used as a coolant; e.g., in electric power generating plants.

Core: The uranium-containing heart of a nuclear reactor, where energy is released.

Corrosion: The dissolving and wearing away of metal caused by a chemical reaction such as between water and the pipes that the water contacts, chemicals touching a metal surface, or contact between two metals.

Corrosive: A chemical agent that reacts with the surface of a material causing it to deteriorate or wear away.

Cost-Effective Alternative: An alternative control or corrective method identified after analysis as being the best available in terms of reliability, permanence, and economic considerations. Although costs are one important consideration, when regulatory and compliance methods are being considered, such analysis does not require EPA to choose the least expensive alternative. For example, when selecting a method for cleaning up a site on the Superfund National Priorities List, the Agency balances costs with the long-term effectiveness of the various methods proposed.

Cost Recovery: A legal process by which potentially responsible parties who contributed to contamination at a Superfund site can be required to reimburse the Trust Fund for money spent during any cleanup actions by the federal government.

Cover: Vegetation or other material providing protection as ground cover.

Cover Material: Soil used to cover compacted solid waste in a sanitary landfill.

Crawl Space: In some types of houses, which are constructed so that the floor is raised slightly above the ground, an area beneath the floor which allows access to utilities and other services. This is in contrast to slab-on-grade or basement construction houses.

Criteria: Descriptive factors taken into account by EPA in setting standards for various pollutants. These factors are used to determine limits on allowable concentration levels, and to limit the number of violations per year. When issued by EPA, the criteria provide guidance to the states on how to establish their standards.

Criteria Pollutants: The 1970 amendments to the Clean Air Act required EPA to set National Ambient Air Quality Standards for certain pollutants known to be hazardous to human health. EPA has identified and set standards to protect human health and welfare for six pollutants: ozone, carbon monoxide, total suspended particulates, sulfur dioxide, lead, and nitrogen oxide. The term, "criteria pollutants" derives from the requirement that EPA must describe the characteristics and potential health and welfare effects of these pollutants. It is on the basis of these criteria that standards are set or revised.

Cubic Feet Per Minute (CFM): A measure of the volume of a substance flowing through air within a fixed period of time. With regard to indoor air, refers to the amount of air, in cubic feet, that is exchanged with indoor air in a minute's time, or an air exchange rate.

Cultural Eutrophication: Increasing rate at which water bodies "die" by pollution from human activities.

Cumulative Working Level Months (CWLM): The sum of lifetime exposure to radon working levels expressed in total working level months.

Curie: A quantitative measure of radioactivity equal to 3.7 x 1010 disintegrations per second.

Cutie-Pie: An instrument used to measure radiation levels.

Cyclone Collector: A device that uses centrifugal force to pull large particles from polluted air.

D

DDT: The first chlorinated hydrocarbon insecticide (chemical name: Dichloro-Diphsdyl-Trichloromethane). It has a half-life of 15 years and can collect in fatty tissues of certain animals. EPA banned registration and interstate sale of DDT for virtually all but emergency uses in the United States in 1972 because of its persistence in the environment and accumulation in the food chain.

Data Call-In: A part of the Office of Pesticide Programs (OPP) process of developing key required test data, especially on the long-term, chronic effects of existing pesticides, in advance of scheduled Registration Standard reviews. Data Call-In is an adjunct of the Registration Standards program intended to expedite reregistration and involves the "calling in" of data from manufacturers.

Dechlorination: Removal of chlorine from a substance by chemically replacing it with hydrogen or hydroxide ions in order to detoxify the substances involved.

Decibel (dB): A unit of sound measurement. In general, a sound doubles in loudness for every increase of ten decibels.

Decomposition: The breakdown of matter by bacteria and fungi. It changes the chemical makeup and physical appearance of materials.

Degradation: The process by which a chemical is reduced to a less complex form.

Delegated State: A state (or other governmental entity) which has applied for, and received authority to administer, within its territory, its state regulatory program as the federal program required under a particular federal statute. As used in connection with NPDES, UIC, and PWS programs, the term does not connote any transfer of federal authority to a state.

Defoliant: A herbicide that removes leaves from trees and growing plants.

Delist: Use of the petition process to have a facility's toxic designation rescinded.

Denitrification: The anaerobic biological reduction of nitrate nitrogen to nitrogen gas.

Depletion Curve: In hydraulics, a graphical representation of water depletion from storage-stream channels, surface soil, and ground water. A depletion curve can be drawn for base flow, direct runoff, or total flow.

Depressurization: A condition that occurs when the air pressure inside a structure is lower that the air pressure outside. Depressurization can occur when household appliances that consume or exhaust house air, such as fireplaces or furnaces, are not supplied with enough makeup air. Radon-containing soil gas may be drawn into a house more rapidly under depressurized conditions.

Dermal Toxicity: The ability of a pesticide or toxic chemical to poison people or animals by contact with the skin. (See: contact pesticide.)

DES: A synthetic estrogen, diethylstilbestrol is used as a growth stimulant in food animals. Residues in meat are thought to be carcinogenic.

Desalinization: Removing salt from ocean or brackish water.

Desiccant: A chemical agent that absorbs moisture; some desiccants are capable of drying out plants or insects, causing death.

Designated Pollutant: An air pollutant which is neither a criteria nor hazardous pollutant, as described in the Clean Air Act, but for which new sources performance standards exist. The Clean Air Act does require states to control these pollutants, which include acid mist, total reduced sulfur (TRS), and fluorides.

Designer Bugs: Popular term for microbes developed through biotechnology that can degrade specific toxic chemicals at their source in toxic waste dumps or in ground water.

Desulfurization: Removal of sulfur from fossil fuels to reduce pollution.

Designated Uses: Those water uses identified in state water quality standards which must be achieved and maintained as required under the Clean Water Act. Uses can include cold water fisheries, public water supply, agriculture, etc.

Detergent: Synthetic washing agent that helps to remove dirt and oil. Some contain compounds which kill useful bacteria and encourage algae growth when they are in wastewater that reaches receiving waters.

Developer: A person, government unit, or company that proposes to build a hazardous waste treatment, storage, or disposal facility.

Diatomaceous Earth (Diatomite): A chalk-like material (fossilized diatoms) used to filter out solid waste in waste-water treatment plants, also used as an active ingredient in some powdered pesticides.

Diazinon: An insecticide. In 1986, EPA banned its use on open areas such as sod farms and golf courses because it posed a danger to migratory birds who gathered on them in large numbers. The ban did not apply to its use in agriculture, or on lawns of homes and commercial establishments.

Dicofol: A pesticide used on citrus fruits.

Differentiation: The process by which single cells grow into particular forms of specialized tissue, e.g., root, stem, leaf.

Diffused Air: A type of aeration that forces oxygen into sewage by pumping air through perforated pipes inside a holding tank and bubbling it through the sewage.

Digester: In wastewater treatment, a closed tank; in solid waste conversion, a unit in which bacterial action is induced and accelerated in order to break down organic matter and establish the proper carbon to nitrogen ratio.

Digestion: The biochemical decomposition of organic matter, resulting in partial gasification, liquefaction, and mineralization of pollutants.

Dike: A low wall that can act as a barrier to prevent a spill from spreading.

Dilution Ratio: The relationship between the volume of water in a stream and the volume of incoming water. It affects the ability of the stream to assimilate waste.

Dinocap: A fungicide used primarily by apple growers to control summer diseases. EPA, in 1986, proposed restrictions on its use when laboratory tests found it caused birth defects in rabbits.

Dinoseb: A herbicide that is also used as a fungicide and insecticide. It was banned by EPA in 1986 because it posed the risk of birth defects and sterility.

Dioxin: Any of a family of compounds known chemically as dibenzo-p-dioxins. Concern about them arises from their potential toxicity and contaminants in commercial products. Tests on laboratory animals indicate that it is one of the more toxic man-made chemicals known.

Direct Discharger: A municipal or industrial facility which introduces pollution through a defined conveyance or system; a point source.

Disinfectant: A chemical or physical process that kills pathogenic organisms in water. Chlorine is often used to disinfect sewage treatment effluent, water supplies, wells, and swimming pools.

Dispersant: A chemical agent used to break up concentrations of organic material such as spilled oil.

Disposal: Final placement or destruction of toxic, radioactive, or other wastes; surplus or banned pesticides or other chemicals; polluted soils; and drums containing hazardous materials from removal actions or accidental releases. Disposal may be accomplished through use of approved secure landfills, surface impoundments, land farming, deep well injection, ocean dumping, or incineration.

Dissolved Oxygen (DO): The oxygen freely available in water. Dissolved oxygen is vital to fish and other aquatic life and for the prevention of odors. Traditionally, the level of dissolved oxygen has been accepted as the single most important indicator of a water body's ability to support desirable aquatic life. Secondary and advanced waste treatment are generally designed to protect DO in waste-receiving waters.

Dissolved Solids: Disintegrated organic and inorganic material contained in water. Excessive amounts make water unfit to drink or use in industrial processes.

Distillation: The act of purifying liquids through boiling, so that the steam condenses to a pure liquid and the pollutants remain in a concentrated residue.

DNA: Deoxyribonucleic acid, the molecule in which the genetic information for most living cells is encoded. Viruses, too, can contain RNA.

DNA Hybridization: Use of a segment of DNA, called a DNA probe, to identify its complementary DNA; used to detect specific genes. This process takes advantage of the ability of a single strand of DNA to combine with a complimentary strand.

Dose: In radiology, the quantity of energy or radiation absorbed.

Dosimeter: An instrument that measures exposure to radiation.

Dredging: Removal of mud from the bottom of water bodies using a scooping machine. This disturbs the ecosystem and causes silting that can kill aquatic life. Dredging of contaminated muds can expose aquatic life to heavy metals and other toxics. Dredging activities may be subject to regulation under Section 404 of the Clean Water Act.

Dump: A site used to dispose of solid wastes without environmental controls.

Dust: Particles light enough to be suspended in air.

Dustfall Jar: An open container used to collect large particles from the air for measurement and analysis.

Dystrophic Lakes: Shallow bodies of water that contain much humus and/or organic matter, that contain many plants but few fish and are highly acidic.

E

Ecological Impact: The effect that a man-made or natural activity has on living organisms and their non-living (abiotic) environment.

Ecology: The relationship of living things to one another and their environment, or the study of such relationships.

Economic Poisons: Chemicals used to control pests and to defoliate cash crops such as cotton.

Ecosphere: The "bio-bubble" that contains life on earth, in surface waters, and in the air. (See: biosphere.)

Ecosystem: The interacting system of a biological community and its non-living environmental surroundings.

Effluent: Wastewater—treated or untreated—that flows out of a treatment plant, sewer, or industrial outfall. Generally refers to wastes discharged into surface waters.

Effluent Limitation: Restrictions established by a State or EPA on quantities, rates, and concentrations in wastewater discharges.

Electrodialysis: A process that uses electrical current applied to permeable membranes to remove minerals from water. Often used to desalinize salty or brackish water.

Electrostatic Precipitator (ESP): An air pollution control device that removes particles from a gas stream (smoke) after combustion occurs. The ESP imparts an electrical charge to the particles, causing them to adhere to metal plates inside the precipitator. Rapping on the plates causes the particles to fall into a hopper for disposal.

Eligible Costs: The construction costs for waste-water treatment works upon which EPA grants are based.

Emergency (Chemical): A situation created by an accidental release or spill of hazardous chemicals which poses a threat to the safety of workers, residents, the environment, or property.

Emergency Episode: (See: air pollution episode.)

Eminent Domain: Government taking—or forced acquisition—of private land for public use, with compensation paid to the landowner.

Emission: Pollution discharged into the atmosphere from smokestacks, other vents, and surface areas of commercial or industrial facilities; from residential chimneys; and from motor vehicle, locomotive, or aircraft exhausts.

Emission Factor: The relationship between the amount of pollution produced and the amount of raw material processed. For example, an emission factor for a blast furnace making iron would be the number of pounds of particulates per ton of raw materials.

Emission Inventory: A listing, by source, of the amount of air pollutants discharged into the atmosphere of a community. It is used to establish emission standards.

Emission Standard: The maximum amount of air polluting discharge legally allowed from a single source, mobile or stationary.

Emissions Trading: EPA policy that allows a plant complex with several facilities to decrease pollution from some facilities while increasing it from others, so long as total results are equal to or better than previous limits. Facilities where this is done are treated as if they exist in a bubble in which total emissions are averaged out. Complexes that reduce emissions substantially may "bank" their "credits" or sell them to other industries.

Endangered Species: Animals, birds, fish, plants, or other living organisms threatened with extinction by man-made or natural changes in their environment. Requirements for declaring a species endangered are contained in the Endangered Species Act.

Endangerment Assessment: A study conducted to determine the nature and extent of contamination at a site on the National Priorities List and the risks posed to public health or the environment. EPA or the state conduct the study when a legal action is to be taken to direct potentially responsible parties to clean up a site or pay for the cleanup. An endangerment assessment supplements a remedial investigation.

Enforcement: EPA, state, or local legal actions to obtain compliance with environmental laws, rules, regulations, or agreements and/or obtain penalties or criminal sanctions for violations. Enforcement procedures may vary, depending on the specific requirements of different environmental laws and related implementing regulatory requirements. Under CERCLA, for example, EPA will seek to require potentially responsible parties to clean up a Superfund site, or pay for the cleanup, whereas under the Clean Air Act the agency may invoke sanctions against cities failing to meet ambient air quality standards that could prevent certain types of construction or federal funding. In other situations, if investigations by EPA and state agencies uncover willful violations, criminal trials and penalties are sought.

Enforcement Decision Document (EDD): A document that provides an explanation to the public of EPA's selection of the cleanup alternative at enforcement sites on the National Priorities List. Similar to a Record of Decision.

Enrichment: The addition of nutrients (e.g., nitrogen, phosphorus, carbon compounds) from sewage effluent or agricultural runoff to surface water. This process greatly increases the growth potential for algae and aquatic plants.

Environment: The sum of all external conditions affecting the life, development and survival of an organism.

Environmental Assessment: A written environmental analysis which is prepared pursuant to the National Environmental Policy Act to determine whether a federal action would significantly affect the environment and thus require preparation of a more detailed environmental impact statement.

Environmental Audit: 1. An independent assessment of the current status of a party's compliance with applicable environmental requirements. 2. An independent evaluation of a party's environmental compliance policies, practices, and controls.

Environmental Impact Statement: A document required of federal agencies by the National Environmental Policy Act for major projects or legislative proposals significantly affecting the environment. A tool for decision making, it describes the positive and negative effects of the undertaking and lists alternative actions.

Environmental Response Team: EPA experts located in Edison, N.J., and Cincinnati, OH, who can provide around-the-clock technical assistance to EPA regional offices and states during all types of emergencies involving hazardous waste sites and spills of hazardous substances.

EPA: The U.S. Environmental Protection Agency; established in 1970 by Presidential Executive Order, bringing together parts of various government agencies involved with the control of pollution.

Epidemic: Widespread outbreak of a disease, or a large number of cases of a disease in a single community or relatively small area.

Epidemiology: The study of diseases as they affect population, including the distribution of disease, or other health-related states and events in human populations, the factors (e.g. age, sex, occupation, economic status) that influence this distribution, and the application of this study to control health problems.

Episode (Pollution): An air pollution incident in a given area caused by a concentration of atmospheric pollution reacting with meteorological conditions that may result in a significant increase in illnesses or deaths. Although most commonly used in relation to air pollution, the term may also be used in connection with other kinds of environmental events such as a massive water pollution situation.

Equivalent Method: Any method of sampling and analyzing for air pollution which has been demonstrated to the EPA Administrator's satisfaction to be, under specific conditions, an acceptable alternative to the normally used reference methods.

Equilibrium: In relation to radiation, the state at which the radioactivity of consecutive elements within a radioactive series is neither increasing nor decreasing.

Erosion: The wearing away of land surface by wind or water. Erosion occurs naturally from weather or runoff but can be intensified by land-clearing practices related to farming, residential or industrial development, road building, or timber-cutting.

Estuary: Regions of interaction between rivers and nearshore ocean waters, where tidal action and river flow create a mixing of fresh and salt water. These areas may include bays, mouths of rivers, salt marshes, and lagoons. These brackish water ecosystems shelter and feed marine life, birds, and wildlife. (See: wetlands.)

Ethylene Dibromide (EDB): A chemical used as an agricultural fumigant and in certain industrial processes. Extremely toxic and found to be a carcinogen in laboratory animals, EDB has been banned for most agricultural uses in the United States.

Eutrophication: The slow aging process during which a lake, estuary, or bay evolves into a bog or marsh and eventually disappears. During the later stages of eutrophication the water body is choked by abundant plant life as the result of increased amounts of nutritive compounds such as nitrogen and phosphorus. Human activities can accelerate the process.

Eutrophic Lakes: Shallow, murky bodies of water that have excessive concentrations of plant nutrients causing excessive algal production. (See: dystrophic lakes.)

Evaporation Ponds: Areas where sewage sludge is dumped and allowed to dry out.

Evapotranspiration: The loss of water from the soil both by evaporation and by transpiration from the plants growing in the soil.

Exceedance: Violation of environmental protection standards by exceeding allowable limits or concentration levels.

Exclusionary: Any form of zoning ordinance that tends to exclude specific classes of persons or businesses from a particular district or area.

Exempt Solvent: Specific organic compounds that are not subject to requirements of regulation because they have been deemed by EPA to be of negligible photochemical reactivity.

Exempted Aquifer: Underground bodies of water defined in the Underground Injection Control program as aquifers that are sources of drinking water (although they are not being used as such) and that are exempted from regulations barring underground injection activities.

Exposure: The amount of radiation or pollutant present in an environment which represents a potential health threat to the living organisms in that environment.

Extremely Hazardous Substances: Any of 406 chemicals identified by EPA on the basis of toxicity, and listed under SARA Title III. The list is subject to revision.

F

Fabric Filter: A cloth device that catches dust particles from industrial emissions.

Feasibility Study: 1. Analysis of the practicability of a proposal; e.g., a description and analysis of the potential cleanup alternatives for a site or alternatives for a site on the National Priorities List. The feasibility study usually recommends selection of a cost-effective alternative. It usually starts as soon as the remedial investigation is underway; together, they are commonly referred to as the "RI/FS". The term can apply to a variety of proposed corrective or regulatory actions. 2. In research, a small-scale investigation of a problem to ascertain whether or not a proposed research approach is likely to provide useful data.

Fecal Coliform Bacteria: Bacteria found in the intestinal tracts of mammals. Their presence in water or sludge is an indicator of pollution and possible contamination by pathogens.

Feedlot: A relatively small, confined area for the controlled feeding of animals that tends to concentrate large amounts of animal wastes that cannot be absorbed by the soil and, hence, may be carried to nearby streams or lakes by rainfall runoff.

Fen: A type of wetland that accumulates peat deposits. Fens are less acidic than bogs, deriving most of their water from groundwater rich in calcium and magnesium. (See: wetlands.)

Fermentation: Chemical reactions accompanied by living microbes that are supplied with nutrients and other critical conditions such as heat, pressure, and light that are specific to the reaction at hand.

Fertilizer: Materials such as nitrogen and phosphorus that provide nutrients for plants. Commercially sold fertilizers may contain other chemicals or may be in the form of processed sewage sludge.

Filling: Depositing dirt and mud or other materials into aquatic areas to create more dry land, usually for agricultural or commercial development purposes. Such activities often damage the ecology of the area.

Filtration: A treatment process, under the control of qualified operators, for removing solid (particulate) matter from water by passing the water through porous media such as sand or a man-made filter. The process is often used to remove particles that contain pathogenic organisms.

Finding of No Significant Impact: A document prepared by a federal agency that presents the reasons impact: why a proposed action would not have a significant impact on the environment and thus would not require preparation of an Environmental Impact Statement. An FNSI is based on the results of an environmental assessment.

First Draw: The water that immediately comes out when a tap is first opened. This water is likely to have the highest level of lead contamination from plumbing materials.

Floc: A clump of solids formed in sewage by biological or chemical action.

Flocculation: The process by which clumps of solids in water or sewage are made to increase in size by biological or chemical action so that they can be separated from the water.

Floor Sweep: A vapor collection designed to capture vapors which are heavier than air and which collect along the floor.

Flowmeter: A gauge that shows the speed of wastewater moving through a treatment plant. Also used to measure the speed of liquids moving through various industrial processes.

Flue Gas: The air coming out of a chimney after combustion in the burner it is venting. It can include nitrogen oxides, carbon oxides, water vapor, sulfur oxides, particles and many chemical pollutants.

Flue Gas Desulfurization: A technology which uses a sorbent, usually lime or limestone, to remove sulfur dioxide from the gases produced by burning fossil fuels. Flue gas desulferization is current the state-of-the art technology in use by major SO_2 emitter, e.g., power plants.

Fluorides: Gaseous, solid, or dissolved compounds containing fluorine that result from industrial processes. Excessive amounts in food can lead to fluor

Fluorocarbon (FCs): Any of a number of organic compounds analogous to hydrocarbons in which one or more hydrogen atoms are replaced by fluorine. Once used in the United States as a propellant in aerosols, they are now primarily used in coolants and some industrial processes. FCs containing chlorine are called chlorofluorocarbons (CFCs). They are believed to be modifying the ozone layer in the stratosphere, thereby allowing more harmful solar radiation to reach the Earth's surface.

Fluorosis: An abnormal condition caused by excessive intake of fluorine, characterized chiefly by mottling of the teeth.

Flume: A natural or man-made channel that diverts water.

Flush: 1. To open a cold-water tap to clear out all the water which may have been sitting for a long time in the pipes. In new homes, to flush a system means to send large volumes of water gushing through the unused pipes to remove loose particles of solder and flux. 2. To force large amounts of water through liquid to clean out piping or tubing, storage or process tanks.

Fly Ash: Non-combustible residual particles from the combustion process, carried by flue gas.

Fogging: Applying a pesticide by rapidly heating the liquid chemical so that it forms very fine droplets that resemble smoke or fog. It may be used to destroy mosquitoes, black flies, and similar pests.

Food Chain: A sequence of organisms, each of which uses the next, lower member of the sequence as a food source.

Formaldehyde: A colorless, pungent, irritating gas, CH_2O, used chiefly as a disinfectant and preservative and in synthesizing other compounds and resins.

Formulation: The substance or mixture of substances which is comprised of all active and inert ingredients in a pesticide.

Fresh Water: Water that generally contains less than 1,000 milligrams-per-liter of dissolved solids,

Fuel Economy Standard: The Corporate Average Fuel Economy Standard (CAFE) which went into effect in 1978. It was meant to enhance the national fuel conservation effort by slowing fuel consumption through a miles-per-gallon requirement for motor vehicles.

Fugitive Emissions: Emissions not caught by a capture system.

Fume: Tiny particles trapped in vapor in a gas stream.

Fumigant: A pesticide that is vaporized to kill pests. Used in buildings and greenhouses.

Functional Equivalent: Term used to describe EPA's decision-making process and its relationship to the environmental review conducted under the National Environmental Policy Act (NEPA). A review is considered functionally equivalent when it addresses the substantive components of a NEPA review.

Fungi: (Singular, Fungus) Molds, mildews, yeasts, mushrooms, and puffballs, a group organisms that lack chlorophyll (i.e., are not photosynthetic) and which are usually non-mobile, filamentous, and multicellular. Some grow in the ground, others attach themselves to decaying trees and other plants, getting their nutrition from decomposing organic matter. Some cause disease, others stabilize sewage and break down solid wastes in composting.

Fungicide: Pesticides which are used to control, prevent, or destroy fungi.

G

Game Fish: Species like trout, salmon, or bass, caught for sport. Many of them show more sensitivity to environmental change than "rough" fish.

Gamma Radiation: Gamma rays are true rays of energy in contrast to alpha and beta radiation. The properties are similar to x-rays and other electromagnetic waves. They are the most penetrating waves of radiant nuclear energy but can be blocked by dense materials such as lead.

Gasification: Conversion of solid material such as coal into a gas for use as a fuel.

Geiger Counter: An electrical device that detects the presence of certain types of radioactivity.

Gene: A length of DNA that directs the synthesis of a protein.

Gene Library: A collection of DNA fragments from cells or organisms. So far, no simple way for sorting the contents of gene libraries has been devised. However, DNA pieces can be moved into bacterial cells where sorting according to gene function becomes feasible.

General Permit: A permit applicable to a class or category of dischargers.

Generator: A facility or mobile source that emits pollutants into the air or releases hazardous wastes into water or soil.

Genetic Engineering: A process of inserting new genetic information into existing cells in order to modify any organism for the purpose of changing one of its characteristics.

Germicide: Any compound that kills disease-causing microorganisms.

Grain Loading: The rate at which particles are emitted from a pollution source. Measurement is made by the number of grains per cubic foot of gas emitted.

Granular Activated Carbon Treatment: A filtering system often used in small water systems and individual homes to remove organics. GAC can be highly effective in removing elevated levels of radon from water.

Gray Water: The term given to domestic wastewater composed of washwater from sinks, kitchen sinks, bathroom sinks and tubs, and laundry tubs.

Greenhouse Effect: The warming of the Earth's atmosphere caused by a build-up of carbon dioxide or other trace gases; it is believed by many scientists that this build-up allows light from the sun's rays to heat the Earth but prevents a counterbalancing loss of heat.

Grinder Pump: A mechanical device which shreds solids and raises the fluid to a higher elevation through pressure sewers.

Gross Alpha Particle Activity: Total activity due to emission of alpha particles. Used as the screening measurement for radioactivity generally due to naturally-occurring radionuclides. Activity is commonly measured in picocuries.

Gross Beta Particle Activity: Total activity due to emission of beta particles. Used as the screening measurement for radioactivity from man-made radionuclides since the decay products of fission are beta particle and gamma ray emitters. Activity is commonly measured in picocuries.

Ground Cover: Plants grown to keep soil from eroding.

Ground Water: The supply of fresh water found beneath the Earth's surface, usually in aquifers, which is often used for supplying wells and springs. Because ground water is a major source of drinking water there is growing concern over areas where leaching agricultural or industrial pollutants or substances from leaking underground storage tanks are contaminating ground water.

H

Habitat: The place where a population (e.g., human, animal, plant, microorganism) lives and its surroundings, both living and non-living.

Half-Life: 1. The time required for a pollutant to lose half its affect on the environment. For example, the half-life of DDT in the environment is 15 years, of radium, 1,580 years. 2. The time required for half of the atoms of a radioactive element to undergo decay. 3. The time required for the elimination of one half a total dose from the body.

Halogen: Any of a group of 5 chemically-related nonmetallic elements that includes bromine, fluorine, chlorine, iodine, and astatine.

Halon: Bromine-containing compounds with long atmospheric lifetimes whose breakdown in the stratosphere cause depletion of ozone. Halons are used in fire-fighting.

Hammermill: A high-speed machine that hammers and cutters to crush, grind chip, or shred solid wastes.

Hard Water: Alkaline water containing dissolved salts that interfere with some industrial processes and prevent soap from lathering.

Hazardous Air Pollutants: Air pollutants which are not covered by ambient air quality standards but which, as defined in the Clean Air Act, may reasonably be expected to cause or contribute to irreversible illness or death. Such pollutants include asbestos, beryllium, mercury, benzene, coke oven emissions, radionuclides, and vinyl chloride.

Hazardous Ranking System: The principle screening tool used by EPA to evaluate risks to public health and the environment associated with abandoned or uncontrolled hazardous waste sites. The HRS calculates a score based on the potential of hazardous substances spreading from the site through the air, surface water, or ground water and on other factors such as nearby population. This score is the primary factor in deciding if the site should be on the National Priorities List and, if so, what ranking it should have compared to other sites on the list.

Hazardous Substance: 1. Any material that poses a threat to human health and/or the environment. Typical hazardous substances are toxic, corrosive, ignitable, explosive, or chemically reactive. 2. Any substance designated by EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or if otherwise emitted to the environment.

Hazardous Waste: By-products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity), or appears on special EPA lists.

Hazards Analysis: The procedures involved in (1) identifying potential sources of release of hazardous materials from fixed facilities or transportation accidents; (2) determining the vulnerability of a geographical area to a release of hazardous materials; and (3) comparing hazards to determine which present greater or lesser risks to a community.

Hazards Identification: Porviding information on which facilities have extremely hazardous substances, what those chemicals are, and how much there is at each facility. The Process also provides information on how the chemicals are stored and whether they are used at high temperatures.

Heat Island Effect: A "dome" of elevated temperatures over an urban area caused by structural and pavement heat fluxes, and pollutant emissions from the area below the dome.

Heavy Metals: Metallic elements with high atomic weights, e.g., mercury, chromium, cadmium, arsenic, and lead. They can damage living things at low concentrations and tend to accumulate in the food chain.

Heptachlor: An insecticide that was banned on some food products in 1975 and all of them 1978. It was allowed for use in seed treatment until in 1983. More recently it was found in milk and other dairy products in Arkansas and Missouri, as a result of illegally feeding treated seed to dairy cattle.

Herbicide: A chemical pesticide designed to control or destroy plants, weeds, or grasses.

Herbivore: An animal that feeds on plants.

Heterotrophic Organisms: Consumers such as humans and animals, and decomposers—chiefly bacteria and fungi—that are dependent on organic matter for food.

High-Density Polyethylene: A material that produces toxic fumes when burned. Used to make plastic bottles and other products.

High-Level Radioactive Waste (HLW): Waste generated in the fuel of a nuclear reactor, found at nuclear reactors or nuclear fuel reprocessing plants. It is a serious threat to anyone who comes near the wastes without shielding. (See Low-Level Radioactive Waste).

Holding Pond: A pond or reservoir, usually made of earth, built to store polluted runoff.

Hood Capture Efficiency: The emissions from a process which are captured by hood and directed into the control device, expressed as a percent of all emissions.

Host: 1. In genetics, the organism, typically a bacterium, into which a gene from another organism is transplanted. 2. In medicine, an animal infected by or parasitized by another organism.

Humus: Decomposed organic material.

Hybrid: A cell or organism resulting from a cross between two unlike plant or animal cells or organisms.

Hybridoma: A hybrid cell that produces monoclonal antibodies in large quantities.

Hydrocarbons (HC): Chemical compounds that consist entirely of carbon and hydrogen.

Hydrogen Sulfide (HS): Gas emitted during organic decomposition. Also a byproduct of oil refining and burning. It smells like rotten eggs and, in heavy concentration, can cause illness.

Hydrogeology: The geology of ground water, with particular emphasis on the chemistry and movement of water.

Hydrology: The science dealing with the properties,distribution, and circulation of water.

I

Ignitable: Capable of burning or causing a fire.

Impoundment: A body of water or sludge confined by a dam, dike, floodgate, or other barrier.

Immediately Dangerous to Life and Health (IDLH): The maximum level to which a healthy individual can be exposed to a chemical for 30 minutes and escape without suffering irreversible health effects or impairing symptons. Used as a "level of concern." (See: level of concern.)

In Vitro: 1. "In glass"; a test-tube culture. 2. Any laboratory test using living cells taken from an organism.

In Vivo: In the living body of a plant or animal. In vivo tests are those laboratory experiments carried out on whole animals or human volunteers.

Incineration: 1. Burning of certain types of solid, liquid or gaseous materials. 2. A treatment technology involving destruction of waste by controlled burning at high temperatures, e.g., burning sludge to remove the water and reduce the remaining residues to a safe, non-burnable ash which can be disposed of safely on land, in some waters or in underground locations.

Incineration at Sea: Disposal of waste by burning at sea on specially-designed incinerator ships.

Incinerator: A furnace for burning wastes under controlled conditions.

Indicator: In biology, an organism, species, or community whose characteristics show the presence of specific environmental conditions.

Indirect Discharge: Introduction of pollutants from a non-domestic source into a publicly owned waste treatment system. Indirect dischargers can be commercial or industrial facilities whose wastes go into the local sewers.

Indoor Air: The breathing air inside a habitable structure or conveyance.

Indoor Air Pollution: Chemical, physical, or biological contaminants in indoor air.

Indoor Climate: Temperature, humidity, lighting and noise levels in a habitable structure or conveyance. Indoor climate can affect indoor air pollution.

Inert Ingredient: Pesticide components such as solvents, carriers, and surfactants that are not active against target pests. Not all inert ingredients are innocuous.

Inertial Separator: A device that uses centrifugal force to separate waste particles.

Infiltration: 1. The penetration of water through the ground surface into sub-surface soil or the penetration of water from the soil into sewer or other pipes through defective joints, connections, or manhole walls. 2. A land application technique where large volumes of waste water are applied to land, allowed to penetrate the surface and percolate through the underlying soil. (See: percolation)

Inflow: Entry of extraneous rain water into a sewer system from sources other than infiltration, such as basement drains, manholes, storm drains, and street washing.

Influent: Water, wastewater, or other liquid flowing into a reservoir, basin, or treatment plant.

Information File: In the Superfund program, a file that contains accurate, up-to-date documents on a Superfund site. The file is usually located in a public building such as a school, library, or city hall that is convenient for local residents.

Injection Well: A well into which fluids are injected for purposes such as waste disposal, improving the recovery of crude oil, or solution mining.

Injection Zone: A geological formation, group of formations, or part of a formation receiving fluids through a well.

Inoculum: 1. Bacterium placed in compost to start biological action. 2. A medium containing organisms which is introduced into cultures or living organisms.

Inorganic Chemicals: Chemical substances of mineral origin, not of basically carbon structure.

Insecticide: A pesticide compound specifically used to kill or control the growth of insects.

Inspection and Maintenance (I/M): 1. Activities to assure proper emissions-related operation of mobile sources of air pollutants, particularly automobile emissions controls. 2. Also applies to to wastewater treatment plants and other anti-pollution facilities and processes.

Instream Use: Water use taking place within a stream channel, e.g., hydroelectric power generation, navigation, water-quality improvement, fish propagation, recreation.

Integrated Pest Management (IPM): A mixture of pesticide and non-pesticide methods to control pests.

Interceptor Sewers: Large sewer lines that, in a combined system, control the flow of the sewage to the treatment plant. In a storm, they allow some of the sewage to flow directly into a receiving stream, thus preventing an overload by a sudden surge of water into the sewers. They are also used in separate systems to collect the flows from main and trunk sewers and carry them to treatment points.

Interim (Permit) Status: Period during which treatment, storage and disposal facilities coming under RCRA in 1980 are temporarily permitted to operate while awaiting denial or issuance of a permanent permit. Permits issued under these circumstances are usually called "Part A" or "Part B" permits.

Interstate Carrier Water Supply: A source of water for drinking and sanitary use on planes, buses, trains, and ships operating in more than one state. These sources are federally regulated.

Interstate Waters: Waters that flow across or form part of state or international boundaries, e.g., the Great Lakes, the Mississippi River, or coastal waters.

Interstitial Monitoring: The continuous surveillance of the space between the walls of an underground storage tank.

Inventory: TSCA inventory of chemicals produced pursuant to Section 8 (b) of the Toxic Substances Control Act.

Inversion: An atmospheric condition caused by a layer of warm air preventing the rise of cooling air trapped beneath it. This prevents the rise of pollutants that might otherwise be dispersed and can cause an air pollution episode.

Ion: An electrically charged atom or group of atoms which can be drawn from waste water during the electrodialysis process.

Ion Exchange Treatment: A common water softening method often found on a large scale at water purification plants that remove some organics and radium by adding calcium oxide or calcium hydroxide to increase the ph to a level where the metals will precipitate out.

Ionization Chamber: A device that measures the intensity of ionizing radiation.

Ionizing Radiation: Radiation that can remove electrons from atoms, i.e., alpha, beta, and gamma radiation.

Irradiated Food: Food that has been subject to brief radioactivity, usually by gamma rays, to kill insects, bacteria, and mold, and preserve it without refrigeration or freezing.

Irradiation: Exposure to radiation of wavelengths shorter than those of visible light (gamma, x-ray, or ultraviolet), for medical purposes, the destruction of bacteria in milk or other foodstuffs, or for inducing polymerization of monomers or vulcanization of rubber.

Irrigation: Technique for applying water or wastewater to land areas to supply the water and nutrient needs of plants.

Isotope: A variation of an element that has the same atomic number but a different weight because of its neutrons. Various isotopes of the same element may have different radioactive behaviors.

K

Kinetic Rate Coefficient: A number that describes the rate at which a water constituent such as a biochemical oxygen demand or dissolved oxygen increases or decreases.

L

Lagoon: (1) A shallow pond where sunlight, bacterial action, and oxygen work to purify wastewater; also used to storage of wastewaters or spent nuclear fuel rods. (2) Shallow body of water, often separated from the sea by coral reefs or sandbars.

Land Application: Discharge of wastewater onto the ground for treatment or reuse. (See: irrigation.)

Land Farming (of waste): A disposal process in which hazardous waste deposited on or in the soil is naturally degraded by microbes.

Landfills: 1. Sanitary landfills are land disposal sites for non-hazardous solid wastes at which the waste is spread in layers, compacted to the smallest practical volume, and cover material applied at the end of each operating day. 2. Secure chemical landfills are disposal sites for hazardous waste. They are selected and designed to minimize the chance of release of hazardous substances into the environment.

Lateral Sewers: Pipes that run under city streets and receive the sewage from homes and businesses.

LC50/Lethal Concentration: Median level concentration, a standard measure of toxicity. It tells how much of a substance is needed to kill half of a group of experimental organisms at a specific time of observation. (See LD50.)

Leachate: A liquid that results from water collecting contaminants as it trickles through wastes, agricultural pesticides or fertilizers. Leaching may occur in farming areas, feedlots, and landfills, and may result in hazardous substances entering surface water, ground water, or soil.

Leachate Collection System: A system that gathers leachate and pumps it to the surface for treatment.

Leaching: The process by which soluble constituents are dissolved and carried down through the soil by a percolating fluid. (See: leachate.)

Lead (PE): A heavy metal that is hazardous to health if breathed or swallowed. Its use in gasoline, paints, and plumbing compounds has been sharply restricted or eliminated by federal laws and regulations. (See: heavy metals.)

Leaded Gasoline: Gasoline to which lead has been added to raise the octane level.

LD 50/ Lethal Dose: The dose of a toxicant that will kill 50 percent of the test organisms within a designated period of time. The lower the LD 50, the more toxic the compound.

LD 0: The highest concentration of a toxic substance at which none of the test organisms die.

LD L0: The lowest concentration and dosage of a toxic substance which kills test organisms.

Level of Concern (LOC): The concentration in air of an extremely hazardous substance above which there may be serious immediate health effects to anyone exposed to it for short periods of time.

Lift: In a sanitary landfill, a compacted layer of solid waste and the top layer of cover material.

Lifting Station: (See: pumping station.)

Limestone Scrubbing: Process in which sulfur gases moving towards a smokestack are passed through a limestone and water solution to remove sulfur before it reaches the atmosphere.

Limiting Factor: A condition, whose absence, or excessive concentration, is incompatible with the needs or tolerance of a species or population and which may have a negative influence on their ability to grow or even survive.

Limnology: The study of the physical, chemical, meteorological, and biological aspects of fresh water.

Liner: 1. A relatively impermeable barrier designed to prevent leachate from leaking from a landfill. Liner materials include plastic and dense clay. 2. An insert or sleeve for sewer pipes to prevent leakage or infiltration.

Lipid Solubility: The maximum concentration of a chemical that will dissolve in fatty substances; lipid soluble substances are insoluble in water. If a substance is lipid soluble it will very selectively disperse through the environment via living tissue.

Liquefaction: Changing a solid into a liquid.

List: Shorthand term for EPA list of violating facilities or list of firms debarred from obtaining government contracts because they violated certain sections of the Clean Air or Clean Water Acts. The list is maintained by The Office of Enforcement and Compliance Monitoring.

Listed Waste: Wastes listed as hazardous under RCRA but which have not been subjected to the Toxic Characteristics Listing Process because the dangers they present are considered self-evident.

Local Emergency Planning Committee (LEPC): A committee appointed by the state emergency response commission, as required by SARA Title III, to formulate a comprehensive emergency plan for its jurisdiction.

Lower Explosive Limit (LEL): The concentration of a compound in air below which a flame will not propagate if the mixture is ignited.

Lowest Achievable Emission Rate: Under the Clean Air Act, this is the rate of emissions which reflects (a) the most stringent emission limitation which is contained in the implementation plan of any state for such source unless the owner or operator of the proposed source demonstrates such limitations are not achievable; or (b) the most stringent emissions limitation achieved in practice, which ever is more stringent. Application of this term does not permit a proposed new or modified source to emit pollutants in excess of existing new source standards.

Low-Level Radioactive Waste (LLRW): Wastes less hazardous than most of those generated by a nuclear reactor. Usually generated by hospitals, research laboratories, and certain industries. The Department of Energy, Nuclear Regulatory Commission, and EPA share responsibilities for managing them. (See: high-level radioactive wastes.)

M

Marine Sanitation Device: Any equipment installed on board a vessel to receive, retain, treat, or discharge sewage and any process to treat such sewage.

Major Modification: This term is used to define modifications with respect to Prevention of Significant Deterioration and New Source Review under the Clean Air Act and refers to modifications to major stationary sources of emissions and provides significant pollutant increase levels below which a modification is not considered major.

Major Stationary Sources: Term used to determine to applicability of Prevention of Significant Deterioration and new source regulations. In a nonattainment area, any stationary pollutant source that has a potential to emit more than 100 tons per year is considered a major stationary source. In PSD areas the cutoff level may be either 100 or 250 tons, depending upon the type of source.

Manufacturers Formulation: A list of substances or component parts as described by the maker of a coating, pesticide or other product containing chemicals or other substances.

Marsh: A type of wetland that does not accumulate appreciable peat deposits and is dominated by herbaceous vegetation. Marshes may be either fresh or saltwater and tidal or non-tidal. (See: wetlands.)

Matabolite: Any substance produced in or by biological processes and derived from a pesticide.

Material Safety Data Sheet (MSDS): A compilation of information required under the OSHA Communication Standard on the identity of hazardous chemicals, health, and physical hazards, exposure limits, and precautions. Section 311 of SARA requires facilities to submit MSDSs under certain circumstances.

Maximum Contaminant Level: The maximum permissible level of a contaminant in water delivered to any user of a public water system. MCLs are enforceable standards.

Mechanical Aeration: Use of mechanical energy to inject air into water to cause a waste stream to absorb oxygen.

Mechanical Turbulence: Random irregularities of fluid motion in air caused by buildings or mechanical, non-thermal, processes.

Media: Specific environments—air, water, soil—which are the subject of regulatory concern and activities.

Mercury: A heavy metal that can accumulate in the enivornment and is highly toxic if breathed or swallowed. (See: heavy metals.)

Methane: A colorless, nonpoisonous, flammable gas created by anaerobic decomposition of organic compounds.

Method 18: An EPA test method which uses gas chromatographic techniques to measure the concentration of individual volatile organic compounds in a gas stream.

Method 24: An EPA reference method to determine density, water content and total volatile content (water and VOC) of coatings.

Method 25: An EPA reference method to determine the VOC concentration in a gas stream.

Million-gallons Per Day (MGD): A measure of water flow.

Microbes: Microscopic organisms such as algae, animals, viruses, bacteria, fungus, and protozoa, some of which cause diseases. (See: microorganism.)

Microbial Pesticide: A microorganism that is used to control a pest. They are of low toxicity to man.

Microorganism: Living organisms so small that individually they can usually only be seen through a microscope.

Mist: Liquid particles measuring 500 to 40 microns, that are formed by condensation of vapor. By comparison, "fog" particles are smaller than 40 microns.

Mitigation: Measures taken to reduce adverse impacts on the environment.

Mixed Liquor: A mixture of activated sludge and water containing organic matter undergoing activated sludge treatment in an aeration tank.

Mobile Source: A moving producer of air pollution, mainly forms of transportation such as cars, trucks, motorcycles, airplanes.

Modeling: An investigative technique using a mathematical or physical representation of a system or theory that accounts for all or some its known properties. Models are often used to test the effect of changes of system components on the overall performance of the system.

Model Plant: A description of a typical but theoretical plant used for developing economic, environmental impact and energy impact analyses as support for regulations or regulatory guidelines. It is an imaginary plant, with features of existing or future plants used to estimate the cost of incorporating air pollution control technology as the first step in exploring the economic impact of a potential NSPS.

Monitoring: Periodic or continuous surveillance or testing to determine the level of compliance with statutory requirements and/or pollutant levels in various media or in humans, animals, and other living things.

Monitoring Wells: Wells drilled at a hazardous waste management facility or Superfund site to collect ground-water samples for the purpose of physical, chemical, or biological analysis to determine the amounts, types, and distribution of contaminants in the ground water beneath the site.

Monoclonal Antibodies: (Also called MABs and MCAs) Molecules of living organisms that selectively find and attach to other molecules to which their structure conforms exactly. This could also apply to equivalent activity by chemical molecules.

Muck Soils: Earth made from decaying plant materials.

Mulch: A layer of material (wood chips, straw, leaves, etc.) placed around plants to hold moisture, prevent weed growth, protect the plants, and enrich the soil.

Multiple Use: Use of land for more than one purpose; i.e., grazing of livestock, wildlife production, recreation, watershed, and timber production. Could also apply to use of bodies of water for recreational purposes, fishing, and water supply.

Mutagen: Any substance that can cause a change in genetic material.

Mutate: To bring about a change in the genetic constitution of a cell by altering its DNA. In turn, "mutagenesis" is any process by which cells are mutated.

N

National Ambient Air Quality Standards (NAAQS): Air quality standards established by EPA that apply to outside air throughout the country. (See: criteria pollutants, state implementation plans, emissions trading.)

National Emissions Standards For Hazardous Air Pollutants (NESHAPS): Emissions standards set by EPA for an air pollutant not covered by NAAQS that may cause an increase in deaths or in serious, irreversible, or incapacitating illness. Primary standards are designed to protect human health, secondary standards to protect public welfare.

National Oil and Hazardous Substances Contingency Plan (NOHSCP/NCP): The federal regulation that guides determination of the sites to be corrected under the Superfund program and the program to prevent or control spills into surface waters or other portions of the environment.

National Pollutant Discharge Elimination System (NPDES): A provision of the Clean Water Act which prohibits discharge of pollutants into waters of the United States unless a special permit is issued by EPA, a state, or (where delegated) a tribal government on an Indian reservation.

National Priorities List (NPL): EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under Superfund. A site must be on the NPL to receive money from the Trust Fund for remedial action. The list is based primarily on the score a site receives from the Hazard Ranking System. EPA is required to update the NPL at least once a year.

National Response Center: The federal operations center that receives notifications of all releases of oil and hazardous substances into the environment. The Center, open 24 hours a day, is operated by the U.S. Coast Guard, which evaluates all reports and notifies the appropriate agency.

National Response Team (NRT): Representatives of 13 federal agencies that, as a team, coordinate federal responses to nationally significant incidents of pollution and provide advice and technical assistance to the responding agency(ies) before and during a response action.

Natural Gas: A natural fuel containing primarily methane and ethane that occurs in certain geologic formations.

Natural Selection: The process of survival of the fittest, by which organisms that adapt to their environment survive and those that do not disappear.

Navigable Waters: Traditionally, waters sufficiently deep and wide for navigation by all, or specified sizes of vessels; such waters in the United States come under federal jurisdiction and are included in certain provisions of the Clean Water Act.

Necrosis: Death of plant or animal cells. In plants, necrosis can discolor areas on the plant or kill it entirely.

Nematocide: A chemical agent which is destructive to nematodes (round worms or threadworms.)

Neutralization: Decreasing the acidity or alkalinity of a substance by adding to it alkaline or acidic materials respectively.

New Source: Any stationary source which is built or modified after publication of final or proposed regulations that prescribe a standard of performance which is intended to apply to that type of emission source.

New Source Performance Standards (NSPS): Uniform national EPA air emission and water effluent standards which limit the amount of pollution allowed from new sources or from existing sources that have been modified.

Nitrate: A compound containing nitrogen which can exist in the atmosphere or as a dissolved gas in water and which can have harmful effects on humans and animals. Nitrates in water can cause severe illness in infants and cows.

Nitric Oxide (NO): A gas formed by combustion under high temperature and high pressure in an internal combustion engine. It changes into nitrogen dioxide in the ambient air and contributes to photochemical smog.

Nitrification: The process whereby ammonia in wastewater is oxidized to nitrite and then to nitrate by bacterial or chemical reactions.

Nitrilotriacetic Acid (NTA): A compound being used to replace phosphates in detergents.

Nitrite: 1. An intermediate in the process of nitrification. 2. Nitrous oxide salts used in food preservation

Nitrogen Dioxide (NO2): The result of nitric oxide combining with oxygen in the atmosphere. A major component of photochemical smog.

Nitrogenous Wastes: Animal or vegetable residues that contain significant amounts of nitrogen.

Nitrogen Oxide (NOx): Product of combustion from transportation and stationary sources and major a contributor to the formation of ozone in the troposphere and acid deposition.

Non-Attainment Area: Geographic area which does not meet one or more of the National Ambient Air Quality Standards for the criteria pollutants designated in the Clean Air Act.

Non-Community Water System: A public water system that is not a community water system, e.g., the water supply at a camp site or national park.

Non-Conventional Pollutant: Any pollutant which is not a statutorily listed or which is poorly understood by the scientific community.

Non-ionizing Electromagnetic Radiation: 1. Radiation that does not change the structure of atoms but does heat tissue and may cause harmful biological effects. 2. Microwaves, radio waves, and low-frequency electromagnetic fields from high-voltage transmission lines.

Non-Point Source: Pollution sources which are diffuse and do not have a single point of origin or are not introduced into a receiving stream from a specific outlet. The pollutants are generally carried off the land by stormwater runoff. The commonly used categories for non-point sources are: agriculture, forestry, urban, mining, construction, dams and channels, land disposal, and saltwater intrusion.

Nuclear Power Plant: A facility that converts atomic energy into usable power; heat produced by a reactor makes steam to drive turbines which produce electricity.

Nuclear Winter: Prediction by some scientists that smoke and debris rising from massive fires resulting from a nuclear war could enter the atmosphere and block out sunlight for weeks or months. The scientists making this prediction project a cooling of the earth's surface, and changes in climate which could, for example, negatively effect world agricultural and weather patterns.

Nutrient: Any substance assimilated by living things that promotes growth. The term is generally applied to nitrogen and phosphorus in wastewater, but is also applied to other essential and trace elements.

O

Off-Site Facility: A hazardous waste treatment, storage or disposal area that is located at a place away from the generating site.

Oil Spill: An accidental or intentional discharge of oil which reaches bodies of water. Can be controlled by chemical dispersion, combustion, mechanical containment, and/or adsorption.

Oil Fingerprinting: A method that identifies sources of oil and allows spills to be traced back to their source.

Oligotrophic Lakes: Deep clear lakes with low nutrient supplies. They contain little organic matter and have a high dissolved-oxygen level.

Oncogenic: A substance that causes tumors, whether benign or malignant.

On-Scene Coordinator (OSC): The predesignated EPA, Coast Guard, or Department of Defense official who coordinates and directs Superfund removal actions or Clean Water Act oil-or hazardous-spill corrective actions.

On-Site Facility: A hazardous waste treatment, storage or disposal area that is located on the generating site.

Opacity: The amount of light obscured by particulate pollution in the air; clear window glass has a zero opacity, a brick wall has 100 percent opacity. Opacity is used as an indicator of changes in performance of particulate matter pollution control systems.

Open Burning: Uncontrolled fires in an open dump.

Open Dump: An uncovered site used for disposal of waste without environmental controls. (See: dump.)

Operable Unit: Term for each of a number of separate activities undertaken as part of a Superfund site cleanup. A typical operable unit would be removing drums and tanks from the surface of a site.

Operation And Maintenance: 1. Activities conducted at a site after a Superfund site action is completed to ensure that the action is effective and operating properly. 2. Actions taken after construction to assure that facilities constructed to treat waste water will be properly operated, maintained,and managed to achieve efficiency levels and prescribed effluent limitations in an optimum manner.

Organic: 1. Referring to or derived from living organisms. 2. In chemistry, any compound containing carbon.

Organic Chemicals/Compounds: Animal or plant-produced substances containing mainly carbon, hydrogen, and oxygen.

Organic Matter: Carbonaceous waste contained in plant or animal matter and originating from domestic or industrial sources.

Organism: Any living thing.

Organophosphates: Pesticide chemicals that contain phosphorus; used to control insects. They are short-lived, but some can be toxic when first applied.

Organotins: Chemical compounds used in anti-foulant paints to protect the hulls of boats and ships, buoys, and dock pilings from marine organisms such as barnacles.

Osmosis: The tendency of a fluid to pass through a permeable membrane such as the wall of a living cell into a less concentrated solution so as to equalize the concentrations on both sides of the membrane.

Outfall: The place where an effluent is discharged into receiving waters.

Overburden: The rock and soil cleared away before mining.

Overfire Air: Air forced into the top of an incinerator or boiler to fan the flames.

Overland Flow: A land application technique that cleanses waste water by allowing it to flow over a sloped surface. As the water flows over the surface, the contaminants are removed and the water is collected at the bottom of the slope for reuse.

Overturn: The period of mixing (turnover), by top to bottom circulation, of previously stratified water masses. This phenomenon may occur in spring and/or fall, or after storms. It results in a uniformity of chemical and physical properties of the water at all depths.

Oxidant: A substance containing oxygen that reacts chemically in air to produce a new substance. The primary ingredient of photochemical smog.

Oxidation: 1. The addition of oxygen which breaks down organic waste or chemicals such as cyanides, phenols, and organic sulfur compounds in sewage by bacterial and chemical means. 2. Oxygen combining with other elements. 3. The process in chemistry whereby electrons are removed from a molecule.

Oxidation Pond: A man-made lake or body of water in which waste is consumed by bacteria. It is used most frequently with other waste-treatment processes. An oxidation pond is basically the same as a sewage lagoon.

Oxygenated Solvent: An organic solvent containing oxygen as part of the molecular structure. Alcohols and ketones are oxygenated compounds often used as paint solvents.

Ozonator: A device that adds ozone to water.

Ozone (O3): Found in two layers of the atmosphere, the stratosphere and the troposphere. In the stratosphere (the atmospheric layer beginning 7 to 10 miles above the earth's surface) ozone is a form of oxygen found naturally which provides a protective layer shielding the earth from ultraviolet radiation's harmful health effects on humans and the environment.In the troposphere (the layer extending up 7 to 10 miles from the earth's surface), ozone is a chemical oxidant and major component of photochemical smog. Ozone can seriously affect the human respiratory system and is one of the most prevalent and widespread of all the criteria pollutants for which the Clean Air Act required EPA to set standards. Ozone in the troposphere is produced through complex chemical reactions of nitrogen oxides, which are among the primary pollutants emitted by combustion sources; hydrocarbons, released into the atmosphere through the combustion, handling and processing of petroleum products; and sunlight.

Ozone Depletion: Destruction of the stratospheric ozone layer which shields the earth from ultraviolet radiation harmful to biological life. This destruction of ozone is caused by the breakdown of certain chlorine and/or-bromine containing compounds (chlorofluorocarbons or halons) which break down when they reach the stratosphere and catalytically destroy ozone molecules.

P

Packed Tower: A pollution control device that forces dirty air through a tower packed with crushed rock or wood chips while liquid is sprayed over the packing material. The pollutants in the air stream either dissolve or chemically react with the liquid.

Pandemic: Widespread throughout an area, nation or the world.

Part A Permit, Part B Permit: (See Interim Permit Status.)

Paraquat: A standard herbicide used to kill various types of crops, including marijuana.

Particulates: Fine liquid or solid particles such as dust, smoke, mist, fumes, or smog, found in air or emissions.

Particulate Loading: The mass of particulates per unit volume of air or water.

Pathogenic: Capable of causing disease.

Pathogens: Microorganisms that can cause disease in other organisms or in humans, animals and plants. They may be bacteria, viruses, or parasites and are found in sewage, in runoff from animal farms or rural areas populated with domestic and/or wild animals, and in water used for swimming. Fish and shellfish contaminated by pathogens, or the contaminated water itself, can cause serious illnesses.

PCBs: A group of toxic, persistent chemicals (polychlorinated biphenyls) used in transformers and capacitators for insulating purposes and in gas pipeline systems as a lubricant. Further sale of new use was banned by law in 1979.

Percolation: The movement of water downward and radially through the sub-surface soil layers, usually continuing downward to the ground water.

Permeability: The rate at which liquids pass through soil or other materials in a specified direction.

Permit: An authorization, license, or equivalent control document issued by EPA or an approved state agency to implement the requirements of an environmental regulation; e.g., a permit to operate a wastewater treatment plant or to operate a facility that may generate harmful emissions.

Persistence: Refers to the length of time a compound, once introduced into the environment, stays there. A compound may persist for less than a second or indefinitely.

Persistent Pesticides: Pesticides that do not break down chemically or break down very slowly and that remain in the environment after a growing season.

Pest: An insect, rodent, nematode, fungus, weed or other form of terrestrial or aquatic plant or animal life or virus, bacterial or microorganism that is injurious to health or the environment.

Pesticide: Substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. Also, any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant. Pesticides can accumulate in the food chain and/or contaminate the environment if misused.

Pesticide Tolerance: The amount of pesticide residue allowed by law to remain in or on a harvested crop. By using various safety factors, EPA sets these levels well below the point where the chemicals might be harmful to consumers.

pH: A measure of the acidity or alkalinity of a liquid or solid material.

Phenols: Organic compounds that are by products of petroleum refining, tanning, and textile, dye, and resin manufacturing. Low concentrations cause taste and odor problems in water; higher concentrations can kill aquatic life and humans.

Pheromone: Hormonal chemical produced by female of a species to attract a mate.

Phosphates: Certain chemical compounds containing phosphorus.

Phosphorus: An essential chemical food element that can contribute to the eutrophication of lakes and other water bodies. Increased phosphorus levels result from discharge of phosphorus-containing materials into surface waters.

Photochemical Oxidants: Air pollutants formed by the action of sunlight on oxides of nitrogen and hydrocarbons.

Photochemical Smog: Air pollution caused by chemical reactions of various pollutants emitted from different sources.

Photosynthesis: The manufacture by plants of carbohydrates and oxygen from carbon dioxide and water in the presence of chlorophyll, using sunlight as an energy source.

Physical and Chemical Treatment: Processes generally used in large-scale waste-water treatment facilities. Physical processes may involve air-stripping or filtration. Chemical treatment includes coagulation, chlorination, or ozone addition. The term can also refer to treatment processes, treatment of toxic materials in surface waters and ground waters, oil spills, and some methods of dealing with hazardous materials on or in the ground.

Phytoplankton: That portion of the plankton community comprised of tiny plants, e.g., algae, diatoms.

Phytotoxic: Something that harms plants.

Picocurie: Measurement of radioactivity. A picocurie is one million millionth, or a trillionth, of a curie, and represents about 2.2 radioactive particle disintegrations per minute.

Picocuries Per Liter pCi/L): A unit of measure used for expressing levels of radon gas. (See picocurie.)

Pig: A container, usually lead, used to ship or store radioactive materials.

Pile: 1. The fuel element in a nuclear reactor. 2. A heap of waste.

Plankton: Tiny plants and animals that live in water.

Plasmid: A circular piece of DNA that exists apart from the chromosome and replicates independently of it. Bacterial plasmids carry information that renders the bacteria resistant to antibiotics. Plasmids are often used in genetic engineering to carry desired genes into organisms.

Plastics: Non-metallic compounds that result from a chemical reaction, and are molded or formed into rigid or pliable construction materials or fabrics.

Plugging: 1. The act or process of stopping the flow of water, oil, or gas into or out of a formation through a borehole or well penetrating that formation. 2. Stopping a leak or sealing off a pipe or hose.

Plume: 1. A visible or measurable discharge of a contaminant from a given point of origin. Can be visible or thermal in water, or visible in the air as, for example, a plume of smoke. 2 The area of measurable and potentially harmful radiation leaking from a damaged reactor. 3. The distance from a toxic release considered dangerous for those exposed to the leaking fumes.

Plutonium: A radioactive metallic element similar chemically to uranium.

Point Source: A stationery location or fixed facility from which pollutants are discharged or emitted. Also, any single identifiable source of pollution, e.g., a pipe, ditch, ship, ore pit, factory smokestack.

Pollen: 1. A fine dust produced by plants. 2.The fertilizing element of flowering plants. 3. A natural or background air pollutant.

Pollutant: Generally, any substance introduced into the environment that adversely affects the usefulness of a resource.

Pollutant Standard Index (PSI): Measure of adverse health effects of air pollution levels in major cities.

Pollution: Generally, the presence of matter or energy whose nature, location or quantity produces undesired environmental effects. Under the Clean Water Act, for example, the term is defined as the man-made or man-induced alteration of the physical, biological, and radiological integrity of water.

Polyelectrolytes: Synthetic chemicals that help solids to clump during sewage treatment.

Polymer: Basic molecular ingredients in plastic.

Polyvinyl Chloride (PVC): A tough, environmentally indestructible plastic that releases hydrochloric acid when burned.

Population: A group of interbreeding organisms of the same kind occupying a particular space. Generically, the number of humans or other living creatures in a designated area.

Post-Closure: The time period following the shutdown of a waste management or manufacturing facility. For monitoring purposes, this is often considered to be 30 years.

Potable Water: Water that is safe for drinking and cooking.

Potentially Responsible Party (PRP): Any individual or company—including owners, operators, transporters or generators—potentially responsible for, or contributing to, the contamination problems at a Superfund site. Whenever possible, EPA requires PRPs, through administrative and legal actions, to clean up hazardous waste sites they have contaminated.

PPM/ PPB: Parts per million/ parts per billion, a way of expressing tiny concentrations of pollutants in air, water, soil, human tissue, food, or other products.

Precipitate: A solid that separates from a solution because of some chemical or physical change.

Precipitation: Removal of solids from liquid waste so that the hazardous solid portion can be disposed of safely; removal of particles from airborne emissions.

Precipitators: Air pollution control devices that collect particles from an emission.

Precursor: In photochemical terminology, a compound such as a volatile organic compound (VOC) that "precedes" an oxidant. Precursors react in sunlight to form ozone or other photochemical oxidants.

Preliminary Assessment: The process of collecting and reviewing available information about a known or suspected waste site or release.

Pressure Sewers: A system of pipes in which water, wastewater, or other liquid is transported to a higher elevation by use of pumping force.

Pretreatment: Processes used to reduce, eliminate, or alter the nature of wastewater pollutants from non-domestic sources before they are discharged into publicly owned treatment works.

Prevention: Measures taken to minimize the release of wastes to the environment.

Prevention of Significant Deterioration (PSD): EPA program in which state and/or federal permits are required that are intended to restrict emissions for new or modified sources in places where air quality is already better than required to meet primary and secondary ambient air quality standards.

Primary Drinking Water Regulation: Applies to public water systems and specifies a contaminant level, which, in the judgement of the EPA Administrator, will have no adverse effect on human health.

Primary Waste Treatment: First steps in wastewater treatment; screens and sedimentation tanks are used to remove most materials that floats or will settle. Primary treatment results in the removal of about 30 percent of carbonaceous biochemical oxygen demand from domestic sewage.

Process Weight: Total weight of all materials, including fuel, used in a manufacturing process. It is used to calculate the allowable particulate emission rate from the process.

Proteins: Complex nitrogenous organic compounds of high molecular weight that contain amino acids as their basic unit and are essential for growth and repair of animal tissue. Many proteins are enzymes.

Protoplast: A membrane-bound cell from which the outer cell wall has been partially or completely removed. The term often is applied to plant cells.

Public Water System: A system that provides piped water for human consumption to at least 15 service connections or regularly serves 25 individuals.

Publicly Owned Treatment Works: A waste-treatment works owned by a state, unit of local government, or Indian tribe, usually designed to treat domestic wastewaters.

Pumping Station: Mechanical devices installed in sewer or water systems or other liquid-carrying pipelines that move the liquids to a higher level.

Putrescible: Able to rot quickly enough to cause odors and attract flies.

Pyrolysis: Decomposition of a chemical by extreme heat.

Q

Quality Assurance/Quality Control: A system of procedures, checks, audits, and corrective actions to ensure that all EPA research design and performance, environmental monitoring and sampling, and other technical and reporting activities are of the highest achievable quality.

Quench Tank: A water-filled tank used to cool incinerator residues or hot materials during industrial process.

R

RAD (Radiation Absorbed Dose): A unit of absorbed dose of radiation. One RAD of absorbed dose is equal to .01 joules per kilogram.

Radiation: Any form of energy propagated as rays, waves, or streams of energetic particles. The term is frequently used in relation to the emission of rays from the nucleus of an atom.

Radiation Standards: Regulations that set maximum exposure limits for protection of the public from radioactive materials.

Radioactive Substances: Substances that emit radiation.

Radiobiology: The study radiation effects on living things.

Radio Frequency Radiation: (See Non-ionizing Radiation.)

Radionuclide: Radioactive element characterized according to its atomic mass and atomic number which can be man-made or naturally occurring. Radioisotopes can have a long life as soil or water pollutants, and are believed to have potentially mutagenic effects on the human body.

Radius of Vulnerable Zone: The maximum distance from the point of release of a hazardous substance in which the airborne concentration could reach the level of concern under specified weather conditions.

Radon: A colorless naturally occurring, radioactive, inert gaseous element formed by radioactive decay of radium atoms in soil or rocks.

Radon Decay Products: A term used to refer collectively to the immediate products of the radon decay chain. These include Po-218, Pb-214, Bi-214, and Po-214, which have an average combined half-life of about 30 minutes.

Rasp: A machine that grinds waste into a manageable material and helps prevent odor.

Raw Sewage: Untreated wastewater.

Reasonably Available Control Technology (RACT): The lowest emissions limit that a particular source is capable of meeting by the application of control technology that is both reasonably available, as well as technologically and economically feasible. RACT is usually applied to existing to existing sources in nonattainment areas and most cases is less stringent than new source performance standards.

Receiving Waters: A river, lake, ocean, stream or other watercourse into which wastewater or treated effluent is discharged.

Recharge: The process by which water is added to a zone of saturation, usually by percolation from the soil surface, e.g., the recharge of an aquifer.

Recharge Area: A land area in which water reaches to the zone of saturation from surface infiltration, e.g., an area where rainwater soaks through the earth to reach an aquifer.

Recombinant Bacteria: A type of microorganism whose genetic makeup has been altered by deliberate introduction of new genetic elements. The offspring of these altered bacteria also contain these new genetic elements.

Recombinant DNA (rDNA): The new DNA that is formed by combining pieces of DNA from different organisms or cells.

Recommended Maximum Contaminant Level (RMCL): The maximum level of a contaminant in drinking water at which no known or anticipated adverse affect on human health would occur, and which includes an adequate margin of safety. Recommended levels are nonenforceable health goals. (See: maximum contaminant level.)

Reconstructed Source: An existing facility in which components are replaced to such an extent that the fixed capital cost of the new components exceed 50 percent of the capital cost that would be required to construct a comparable entirely new facility. New source performance standards may be applied to sources which are reconstructed after the proposal of the standard if it is technologically and economically feasible to meet the standard.

Record of Decision (ROD): A public document that explains which cleanup alternative(s) will be used at National Priorities List sites where, under CERCLA, Trust Funds pay for the cleanup.

Recycle/Reuse: The process of minimizing the generation of waste by recovering usable products that might otherwise become waste. Examples are the recycling of aluminum cans, wastepaper, and bottles.

Red Border: An EPA document that is undergoing final review before being submitted for final management decision.

Red Tide: A proliferation of a marine plankton that is toxic and often fatal to fish. This natural phenomenon may be stimulated by the addition of nutrients. A tide can be called red, green or brown, depending on the coloration of the plankton.

Reentry Interval: The period of time immediately following the application of a pesticide during which unprotected workers should not enter a field.

Refuse: (See: solid waste.)

Refuse Reclamation: Conversion of solid waste into useful products, e.g., composting organic wastes to make soil conditioners or separating aluminum and other metals for melting and recycling.

Regeneration: Manipulation of individual cells or masses of cells to cause them to develop into whole plants.

Regional Response Team (RRT): Representatives of federal, local, and state agencies who may assist in coordination of activities at the request of the On-Scene Coordinator before and during a Superfund response action.

Registrant: Any manufacturer or formulator who obtains registration for a pesticide active ingredient or product,

Registration: Formal listing with EPA of a new pesticide before it can be sold or distributed in intra- or inter-state commerce. The product must be registered under the Federal Insecticide, Fungicide, and Rodenticide Act. EPA is responsible for registration (pre-market licensing) of pesticides on the basis of data demonstrating that they will not cause unreasonable adverse effects on human health or the environment when used according to approved label directions.

Registration Standards: Published reviews of all the data available on pesticide active ingredients.

REM (Roentgen Equivalent Man): The unit of dose equivalent from ionizing radiation to the human body, used to measure the amount of radiation to which a person or a part of a human has been exposed.

Remedial Action (RA): The actual construction or implementation phase of a Superfund site cleanup that follows remedial design.

Remedial Design: A phase of remedial action that follows the remedial investigation/feasibility study and includes development of engineering drawings and specifications for a site cleanup.

Remedial Investigation: An in-depth study designed to gather the data necessary to determine the nature and extent of contamination at a Superfund site; establish criteria for cleaning up the site; identify preliminary alternatives for remedial actions; and support the technical and cost analyses of the alternatives. The remedial investigation is usually done with the feasibility study. Together they are usually referred to as the "RI/FS".

Remedial Project Manager (RPM): The EPA or state official responsible for overseeing remedial action at a site.

Remedial Response: A long-term action that stops or substantially reduces a release or threat of a release of hazardous substances that is serious but not an immediate threat to public health.

Removal Action: Short-term immediate actions taken to address releases of hazardous substances that require expedited response. (See: cleanup.)

Reportable Quantity (RQ): The quantity of a hazardous substance that triggers reports under CERCLA. If a substance is released in amounts exceeding its RQ, the release must be reported to the National Response Center, the SERC, and community emergency coordinators for areas likely to be affected.

Reregistration: The reevaluation and relicensing of existing pesticides originally registered prior to current scientific and regulatory standards. EPA reregisters pesticides through its Registration Standards Program.

Reservoir: Any natural or artificial holding area used to store, regulate, or control water.

Residual: Amount of a pollutant remaining in the environment after a natural or technological process has taken place, e.g., the sludge remaining after initial wastewater treatment, or particulates remaining in air after the air passes through a scrubbing or process.

Resistance: For plants and animals, the ability to withstand poor environmental conditions and/or attacks by chemicals or disease. The ability may be inborn or developed.

Resource: A person, thing, or action needed for living or to improve the quality of life.

Response Action: A CERCLA-authorized action involving either a short-term removal action or a long-term removal response that may include but is not limited to: removing hazardous materials from' a site to an EPA-approved hazardous waste facility for treatment, containment, or destruction; containing the waste safely on-site; destroying or treating the waste on-site; and identifying and removing the source of ground-water contamination and halting further migration of contaminants. (See: cleanup.)

Resource Recovery: The process of obtaining matter or energy from materials formerly discarded.

Restoration: Measures taken to return a site to pre-violation conditions.

Restricted Use: When a pesticide is registered, some or all of its uses may be classified (under FIFRA regulations) for restricted use if the pesticide requires special handling because of its toxicity. Restricted-use pesticides may be applied only by trained, certified applicators or those under their direct supervision.

Restriction Enzymes: Enzymes that recognize certain specific regions of a long DNA molecule and then cut the DNA into smaller pieces.

Reverse Osmosis: A water treatment process used in small water systems by adding pressure to force water through a semi-permeable membrane. Reverse osmosis removes most drinking water contaminants. Also used in wastewater treatment. Large-scale reverse osmosis plants are now being developed.

Ribonucleic Acid (RNA): A molecule that carries the genetic message from DNA to a cell's protein-producing mechanisms; similar to, but chemically different from, DNA.

Ringlemann Chart: A series of shaded illustrations used to measure the opacity of air pollution emissions. The chart ranges from light grey through black and is used to set and enforce emissions standards.

Riparian Habitat: Areas adjacent to rivers and streams that have a high density, diversity, and productivity of plant and animal species relative to nearby uplands.

Riparian Rights: Entitlement of a land owner to the water on or bordering his property, including the right to prevent diversion or misuse of upstream waters. Generally, a matter of state law.

Risk Assessment: The qualitative and quantitative evaluation performed in an effort to define the risk posed to human health and/or the environment by the presence or potential presence and/or use of specific pollutants.

Risk Communication: The exchange of information about health or environmental risks between risk assessors, risk managers, the general public, news media, interest groups, etc..

Risk Management: The process of evaluating alternative regulatory and non-regulatory responses to risk and selecting among them. The selection process necessarily requires the consideration of legal, economic and social factors.

River Basin: The land area drained by a river and its tributaries.

Rodenticide: A chemical or agent used to destroy rats or other rodent pests, or to prevent them from damaging food, crops, etc.

Rough Fish: Those fish, not prized for eating, such as gar and suckers. Most are more tolerant of changing environmental conditions than game species.

Rubbish: Solid waste, excluding food waste and ashes, from homes, institutions, and work-places.

Run-Off: That part of precipitation, snow melt, or irrigation water that runs off the land into streams or other surface-water. It can carry pollutants from the air and land into the receiving waters.

S

Salinity: The degree of salt in water.

Salts: Minerals that water picks up as it passes through the air, over and under the ground, and as it is used by households and industry.

Salt Water Intrusion: The invasion of fresh surface or ground water by salt water. If the salt water comes from the ocean it may be called sea water intrusion.

Salvage: The utilization of waste materials.

Sanitation: Control of physical factors in the human environment that could harm development, health, or survival.

Sand Filters: Devices that remove some suspended solids from sewage. Air and bacteria decompose additional wastes filtering through the sand so that cleaner water drains from the bed.

Sanitary Landfill: (See: landfill, sanitary.)

Sanitary Sewers: Underground pipes that carry off only domestic or industrial waste, not storm water.

Sanitary Survey: An on-site review of the water sources, facilities, equipment, operation and maintenance of a public water system to evaluate the adequacy of those elements for producing and distributing safe drinking water.

Saturated Zone: A subsurface area in which all pores and cracks are filled with water under pressure equal to or greater than that of the atmosphere.

Scrap: Materials discarded from manufacturing operations that may be suitable for reprocessing.

Screening: Use of screens to remove coarse floating and suspended solids from sewage.

Scrubber: An air pollution device that uses a spray of water or reactant or a dry process to trap pollutants in emissions.

Secondary Drinking Water Regulations: Unenforceable regulations which apply to public water systems and which specify the maximum contamination levels which, in the judgement of EPA, are required to protect the public welfare. These regulations apply to any contaminants that may adversely affect the odor or appearance of such water and consequently may cause people served by the system to discontinue its use.

Secondary Treatment: The second step in most publicly owned waste treatment systems in which bacteria consume the organic parts of the waste. It is accomplished by bringing together waste, bacteria, and oxygen in trickling filters or in the activated sludge process. This treatment removes floating and settleable solids and about 90 percent of the oxygen-demanding substances and suspended solids. Disinfection is the final stage of secondary treatment. (See: primary, tertiary treatment.)

Secure Chemical: (See: landfills.)

Secure Maximum Contaminant Level: Maximum permissible level of a contaminant in water which is delivered to the free flowing outlet of the ultimate user of a water supply, the consumer, or of contamination resulting from corrosion of piping and plumbing caused by water quality.

Sediments: Soil, sand, and minerals washed from land into water usually after rain. They pile up in reservoirs, rivers and harbors, destroying fish-nesting areas and holes of water animals, and clouding the water so that needed sunlight might not reach aquatic plants. Careless farming, mining, and building activities will expose sediment materials, allowing them to be washed off the land after rainfalls.

Sedimentation: Letting solids settle out of wastewater by gravity during wastewater treatment.

Sedimentation Tanks: Holding areas for wastewater where floating wastes are skimmed off and settled solids are removed for disposal.

Selective Pesticide: A chemical designed to affect only certain types of pests, leaving other plants and animals unharmed.

Semi-Confined Aquifer: An aquifer that is partially confined by a soil layer (or layers) of low permeability through which recharge and discharge can occur.

Senescence: Term for the aging process. Sometimes used to describe lakes or other bodies of water in advanced stages of eutrophication.

Septic Tank: An underground storage tank for wastes from homes having no sewer line to a treatment plant. The waste goes directly from the home to the tank, where the organic waste is decomposed by bacteria and the sludge settles to the bottom. The effluent flows out of the tank into the ground through drains; the sludge is pumped out periodically.

Service Connector: The pipe that carries tap water from the public water main to a building.

Settleable Solids: Material heavy enough to sink to the bottom of a wastewater treatment tank.

Settling Chamber: A series of screens placed in the way of flue gases to slow the stream of air, thus helping gravity to pull particles out of the emission into a collection area.

Settling Tank: A holding area for wastewater, where heavier particles sink to the bottom for removal and disposal.

Sewage: The waste and wastewater produced by residential and commercial establishments and discharged into sewers.

Sewage Lagoon: (See: lagoon.)

Sewage Sludge: Sludge produced at a Publicly Owned Treatment Works, the disposal of which is regulated under the Clean Water Act.

Sewer: A channel or conduit that carries wastewater and stormwater runoff from the source to a treatment plant or receiving stream. Sanitary sewers carry household, industrial, and commercial waste. Storm sewers carry runoff from rain or snow. Combined sewers are used for both purposes.

Sewerage: The entire system of sewage collection, treatment, and disposal.

Shotgun: Non-scientific term for the process of breaking up the DNA derived from an organism and then moving each separate and unidentified DNA fragment into a bacterium.

Signal Words: The words used on a pesticide label—Danger, Warning, Caution—to indicate the level of toxicity of the chemicals.

Significant Deterioration: Pollution resulting from a new source in previously "clean" areas. (See: prevention of significant deterioration.)

Significant Municipal Facilities: Those publicly owned sewage treatment plants that discharge a million gallons per day or more and are therefore considered by states to have the potential for substantial effect on the quality of receiving waters.

Significant Violations: Violations by point source dischargers of sufficient magnitude and/or duration to be a regulatory priority.

Silt: Fine particles of sand or rock that can be picked up by the air or water and deposited as sediment.

Silviculture: Management of forest land for timber. Sometimes contributes to water pollution, as in clear-cutting.

Sinking: Controlling oil spills by using an agent to trap the oil and sink it to the bottom of the body of water where the agent and the oil are biodegraded.

Site Inspection: The collection of information from a Superfund site to determine the extent and severity of hazards posed by the site. It follows and is more extensive than a preliminary assessment. The purpose is to gather information necessary to score the site, using the Hazard Ranking System, and to determine if the site presents an immediate threat that requires prompt removal action.

Siting: The process of choosing a location for a facility.

Skimming: Using a machine to remove oil or scum from the surface of the water.

Slow Sand Filtration: Treatment process involving passage of raw water through a bed of sand at low velocity which results in the substantial removal of chemical and biological contaminants,

Sludge: A semi-solid residue from any of a number of air or water treatment processes. Sludge can be a hazardous waste.

Slurry: A watery mixture of insoluble matter that results from some pollution control techniques.

Smelter: A facility that melts or fuses ore, often with an accompanying chemical change, to separate the metal. Emissions are known to cause pollution. Smelting is the process involved.

Smog: Air pollution associated with oxidants. (See: photochemical smog.)

Smoke: Particles suspended in air after incomplete combustion of materials.

Soft Detergents: Cleaning agents that break down in nature.

Soft Water: Any water that is not "hard," i.e., does not contain a significant amount of dissolved minerals such as salts containing calcium or magnesium.

Soil Adsorption Field: A sub-surface area containing a trench or bed with clean stones and a system of distribution piping through which treated sewage may seep into the surrounding soil for further treatment and disposal.

Soil Conditioner: An organic material like humus or compost that helps soil absorb water, build a bacterial community, and distribute nutrients and minerals.

Soil Gas: Gaseous elements and compounds that occur in the small spaces between particles of the earth and soil. Such gases can move through or leave the soil or rock, depending on changes in pressure.

Solder: A metallic compound used to seal the joints between pipes. Until recently, most solder ocontained 50 percent lead.

Sole Source Aquifer: An aquifer that supplies 50 percent or more of the drinking water of an area.

Solid Waste: Non-liquid., non-soluble materials ranging from municipal garbage to industrial wastes that contain complex, and sometimes hazardous, substances. Solid wastes also include sewage sludge, agricultural refuse, demolition wastes, and mining residues. Technically, solid waste also refers to liquids and gases in containers.

Solid Waste Disposal: The final placement of refuse that is not salvaged or recycled.

Solid Waste Management: Supervised handling of waste materials from their source through recovery processes to disposal.

Solidification and Stabilization: Removal of wastewater from a waste or changing it chemically to make the waste less permeable and susceptible to transport by water.

Solvent: Substance (usually liquid) capable of dissolving or dispersing one or more other substances.

Soot: Carbon dust formed by incomplete combustion.

Sorption: The action of soaking up or attracting substances. A process used in many pollution control systems.

Special Review: Formerly known as Rebuttable Presumption Against Registration (RPAR), this is the regulatory process through which existing pesticides suspected of posing unreasonable risks to human health, non-target organisms, or the environment are referred for review by EPA. The review requires an intensive risk/benefit analysis with opportunity for public comment. If the risk of any use of a pesticide is found to outweigh social and economic benefits, regulatory actions—ranging from label revisions and use-restriction to cancellation or suspended registration—can be initiated.

Species: A reproductively isolated aggregate of interbreeding populations of organisms.

Spill Prevention Control and Countermeasures Plan (SPCC): Plan covering the release of hazardous substances as defined in the Clean Water Act.

Sprawl: Unplanned development of open land.

Spoil: Dirt or rock that has been removed from its original location, destroying the composition of the soil in the process, as with strip-mining or dredging.

Stabilization: Conversion of the active organic matter in sludge into inert, harmless material.

Stabilization Ponds: (See: lagoon.)

Stable Air: A mass of air that is not moving normally, so that it holds rather than disperses pollutants.

Stack: A chimney or smokestack; a vertical pipe that discharges used air.

Stack Effect: Used air, as in a chimney, that moves upward because it is warmer than the surrounding atmosphere.

Stack Gas: (See: flue gas.)

Stagnation: Lack of motion in a mass of air or water, which tends to hold pollutants.

Standards: Prescriptive norms which govern action and actual limits on the amount of pollutants or emissions produced. EPA, under most of its responsibilities, establishes minimum standards. States are allowed to be stricter.

State Emergency Response Commission (SERC): Commission apointed by each state governor according to the requirements of SARA Title III. The SERC's designate emergency planning districts, appoint local emergency planning committees, and supervise and coordinate their activities.

State Implementation Plans (SIP): EPA-approved state plans for the establishment, regulation, and enforcement of air pollution standards.

Stationary Source: A fixed, non-moving producer of pollution, mainly power plants and other facilities using industrial combustion processes.

Sterilization: 1. In pest control, the use of radiation and chemicals to damage body cells needed for reproduction. 2. The destruction of all living organisms in water or on the surface of various materials. In contrast, disinfection is the destruction of *most* living organisms in water or on surfaces.

Storage: Temporary holding of waste pending treatment or dispcsal. Storage methods include containers, tanks, waste piles, and surface impoundments.

Storm Sewer: A system of pipes (separate from sanitary sewers) that carry only water runoff from building and land surfaces.

Stratification: Separating into layers.

Stratosphere: The portion of the atmosphere that is 10-to-25 miles above the earth's surface.

Strip-Cropping: Growing crops in a systematic arrangement of strips or bands which serve as barriers to wind and water erosion.

Strip-Mining: A process that uses machines to scrape soil or rock away from mineral deposits just under the earth's surface.

Sulfur Dioxide (SO2): A heavy, pungent, colorless, gaseous air pollutant formed primarily by the combustion of fossil plants.

Sump: A pit or tank that catches liquid runoff for drainage or disposal.

Sump Pump: A mechanism for removing water or wastewater from a sump or wet well.

Superfund: The program operated under the legislative authority of CERCLA and SARA that funds and carries out the EPA solid waste emergency and long-term removal remedial activities. These activities include establishing the National Priorities List, investigating sites for inclusion on the list, determining their priority level on the list, and conducting and/or supervising the ultimately determined cleanup and other remedial actions.

Surface Impoundment: Treatment, storage, or disposal of liquid hazardous wastes in ponds.

Surface Water: All water naturally open to the atmosphere (rivers, lakes, reservoirs, streams, impoundments, seas, estuaries, etc.) and all springs, wells, or other collectors which are directly influenced by surface water.

Surfactant: A surface-active agent used in detergents to cause lathering.

Surveillance System: A series of monitoring devices designed to determine environmental quality.

Suspended Solids: Small particles of solid pollutants that float on the surface of, or are suspended in sewage or other liquids. They resist removal by conventional means. (See: Total Suspended Solids.)

Suspension: The act of suspending the use of a pesticide when EPA deems it necessary to do so in order to prevent an imminent hazard resulting from continued use of the pesticide. An emergency suspension takes effect immediately; under an ordinary suspension a registrant can request a hearing before the suspension goes into effect. Such a hearing process might take six months.

Suspension Culture: Individual cells or small clumps of cells growing in a liquid nutrient medium.

Swamp: A type of wetland that is dominated by woody vegetation and does not accumulate appreciable peat deposits. Swamps may be fresh or salt water and tidal or non-tidal. (See: Wetlands.)

Synergism: The cooperative interaction of two or more chemicals or other phenomena producing a greater total effect than the sum of their individual effects.

Synthetic Organic Chemicals (SOCs): Man-made organic chemicals. Some SOCs are volatile, others tend to stay dissolved in water rather than evaporate out of it.

Systemic Pesticide: A chemical that is taken up from the ground or absorbed through the surface and carried through the system of the organism being protected, making the organism toxic to pests.

T

Tailings: Residue of raw materials or waste separated out during the processing of crops or mineral ores

TBT Paints (Trybutilin): (See: organotins.)

Technology-Based Standards: Effluent limitations applicable to direct and indirect sources which are developed on a category-by-category basis using statutory factors, not including water-quality effects.

Teratogen: Substance that causes malformation or serious deviation from normal development of embryos and fetuses.

Terracing: Diking, built along the contour of sloping agricultural land, that holds runoff and sediment to reduce erosion.

Tertiary Treatment: Advanced cleaning of wastewater that goes beyond the secondary or biological stage. It removes nutrients such as phosphorus and nitrogen and most BOD and suspended solids.

Thermal Pollution: Discharge of heated water from industrial processes that can affect the life processes of aquatic organisms.

Threshold Limit Value (TLV): Represents the air concentrations of chemical substances to which it is believed that workers may be daily exposed without adverse effect.

Threshold Planning Quantity: A quantity designated for each chemical on the list of extremely hazardous substances that triggers notification by facilities to the state emergency response commission that such facilities are subject to emergency planning under SARA Title III.

Tidal Marsh: Low, flat marshlands traversed by channels and tidal hollows and subject to tidal inundation; normally, the only vegetation present are salt-tolerant bushes and grasses. (See: wetlands.)

Tolerances: The permissible residue levels for pesticides in raw agricultural produce and processed foods. Whenever a pesticide is registered for use on a food or a feed crop, a tolerance (or exemption from the tolerance requirement) must be established. EPA establishes the tolerance levels, which are enforced by the Food and Drug Administration and the Department of Agriculture.

Topography: The physical features of a surface area including relative elevations and the position of natural and man-made features.

Total Suspended Solids (TSS): A measure of the suspended solids in wastewater, effluent, or water bodies, determined by using tests for "total suspended non-filterable solids." (See: suspended solids.)

Toxic: Harmful to living organisms.

Toxic Pollutants: Materials contaminating the environment that cause death, disease, birth defects in organisms that ingest or absorb them. The quantities and length of exposure necessary to cause these effects can vary widely.

Toxic Chemical Release Form: Information form required to be submitted by facilities that manufacture, process, or use (in quantities above a specific amount) chemicals listed under SARA Title III.

Toxic Cloud: Airborne mass of gases, vapors, fumes, or aerosols containing toxic materials.

Toxic Substance: A chemical or mixture that may present an unreasonable risk of injury to health or the environment.

Toxicant: A poisonous agent that kills or injures animal or plant life.

Toxicity: The degree of danger posed by a substance to animal or plant life. (See: acute, chronic toxicity.)

Toxicology: The science and study of poisons control.

Transformation: The process of placing new genes into a host cell, thereby inducing the host cell to exhibit functions encoded by the DNA.

Transpiration: The process by which water vapor is lost to the atmosphere from living plants. The term can also be applied to the quantity of water thus dissipated.

Trash-to-Energy Plan: A plan for putting waste back to work by burning trash to produce energy.

Treatment, Storage, and Disposal Facility: Site where a hazardous substance is treated, stored, or disposed. TSD facilities are regulated by EPA and states under RCRA.

Trichloroethylene TCE): A stable, low-boiling colorless liquid, toxic by inhalation. TCE is used as a solvent, metal degreasing agent, and in other industrial applications.

Trickling Filter: A coarse, biological treatment system in which wastewater is trickled over a bed of stones or other material covered with bacterial growth. The bacteria break down the

Trihalomethane (THM): One of a family of organic compounds, named as derivatives of methane. THM's are generally the by-product from chlorination of drinking water that contains organic material.

Troposphere: The lower atmosphere, the portion of the atmosphere between seven and ten miles from the Earth's surface where clouds are formed.

Trust Fund (CERCLA): A fund set up under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to help pay for cleanup of hazardous waste sites and for legal action to force those responsible for the sites to clean them up.

Tundra: A type of ecosystem dominated by lichens, mosses, grasses, and woody plants. Tundra is found at high latitudes (arctic tundra) and high altitudes (alpine tundra). Arctic tundra is underlain by permafrost and is usually very wet. (See: wetlands.)

Turbidimeter: A device that measures the amount of suspended solids in a liquid.

Turbidity: 1. Haziness in air caused by the presence of particles and pollutants. 2. A similar cloudy condition in water due to suspended silt or organic matter.

U

Ultra Clean Coal (UCC): Coal that has been washed, ground into fine particles, then chemically treated to remove sulfur, ash, silicone, and other substances; usually briquetted and coated with a sealant made from coal.

Ultraviolet Rays: Radiation from the sun that can be useful or potentially harmful. UV rays from one part of the spectrum enhance plant life and are useful in some medical and dental procedures; UV rays from other parts of the spectrum to which humans are exposed (e.g., while getting a sun tan) can cause skin cancer or other tissue damage. The ozone layer in the atmosphere provides a protective shield that limits the amount of ultraviolet rays that reach the Earth's surface.

Underground Injection Control (UIC): The program under the Safe Drinking Water Act that regulates the use of wells to pump fluids into the ground.

Underground Sources of Drinking Water: As defined in the UIC program, this terms refers to aquifers that are currently being used as a source of drinking water, and those that are capable of supplying a public water system. They have a total dissolved solids content of 10,000 milligrams per liter or less, and are not "exempted aquifers." (See: exempted aquifer.)

Underground Storage Tank: A tank located all or partially under ground that is designed to hold gasoline or other petroleum products or chemical solutions.

Unsaturated Zone: The area above the water table where the soil pores are not fully saturated, although some water may be present.

Uranium: A radioactive heavy metal element used in nuclear reactors and the production of nuclear weapons. Term refers usually to U-238, the most abundant radium isotope, although a small percentage of naturally-occurring uranium is U-235.

Urban Runoff: Stormwater from city streets and adjacent domestic or commercial properties that may carry pollutants of various kinds into the sewer systems and/or receiving waters.

V

Vaccine: Dead or partial or modified antigen used to induce immunity to certain infectious diseases.

Vapor: The gaseous phase of substances that are liquid or solid at atmospheric temperature and pressure, e.g., steam.

Vapor Capture System: Any combination of hoods and ventilation system that captures or contains organic vapors in order that they may be directed to an abatement or recovery device.

Vapor Dispersion: The movement of vapor clouds in air due to wind, gravity spreading, and mixing.

Vapor Plumes: Flue gases that are visible because they contain water droplets.

Vaporization: The change of a substance from a liquid to a gas.

Variance: Government permission for a delay or exception in the application of a given law, ordinance, or regulation.

Vector: 1. An organism often an insect or rodent, that carries disease. 2. An object that is used to transport genes into a host cell (vectors can be plasmids, viruses, or other bacteria). A gene is placed in the vector; the vector then "infects" the bacterium.

Ventilation/Suction: The act of admitting fresh air into a space in order to replace stale or contaminated air; achieved by blowing air into the space. Similarly, suction represents the admission of fresh air into an interior space by lowering the pressure outside of the space, thereby drawing the contaminated air outward.

Vinyl Chloride: A chemical compound, used in producing some plastics, that is believed to be carcogenic.

Virus: The smallest form of microorganisms capable of causing disease.

Volatile: Description of any substance that evaporates readily.

Volatile Organic Compound (VOC): Any organic compound which participates in atmospheric photochemical reactions except for those designated by the EPA Administrator as having negligible photochemical reactivity.

Volatile Synthetic Organic Chemicals: Chemicals that tend to volatilize or evaporate from water.

Vulnerability Analysis: Assessment of elements in the community that are susceptible to damage should a release of hazardous materials occur.

Vulnerable Zone: An area over which the airborne concentration of a chemical involved in an accidental release could reach the level of concern.

W

Waste: 1. Unwanted materials left over from a manufacturing process. 2. Refuse from places of human or animal habitation.

Waste Load Allocation: The maximum load of pollutants each discharger of waste is allowed to release into a particular waterway. Discharge limits are usually required for each specific water quality criterion being, or expected to be, violated.

Waste Treatment Stream: The continuous movement of waste from generator to treater and disposer.

Waste Treatment Plant: A facility containing a series of tanks, screens, filters and other processes by which pollutants are removed from water.

Wastewater: The spent or used water from individual homes, a community, a farm, or an industry that contains dissolved or suspended matter.

Wastewater Operations and Maintenance: Actions taken after construction to assure that facilities constructed to treat wastewater will be properly operated, maintained, and managed to achieve efficiency levels and prescribed effluent levels in an optimum manner.

Water Pollution: The presence in water of enough harmful or objectionable material to damage the water's quality.

Water Quality Criteria: Specific levels of water quality which, if reached, are expected to render a body of water suitable for its designated use. The criteria are based on specific levels of pollutants that would make the water harmful if used for drinking, swimming, farming, fish production, or industrial processes.

Water Quality Standards: State-adopted and EPA-approved ambient standards for water bodies. The standards cover the use of the water body and the water quality criteria which must be met to protect the designated use or uses.

Watershed: The land area that drains into a stream.

Water Supplier: A person who owns or operates a public water system.

Water Supply System: The collection, treatment, storage, and distribution of potable water from source to consumer.

Water Solubility: The maximum concentration of a chemical compound which can result when it is dissolved in water. If a substance is water soluble it can very readily disperse through the environment.

Water Table: The level of ground water.

Well: A bored, drilled, or driven shaft, or a dug hole, whose depth is greater than the largest surface dimension and whose purpose is to reach underground water supplies or oil, or to store or bury fluids below ground.

Well Injection: The subsurface emplacement of fluids in a well.

Well Monitoring: The measurement, by on-site instruments or laboratory methods, of the quality of water in a well.

Well Plug: A watertight and gastight seal installed in a bore hole or well to prevent movement of fluids.

Wetlands: An area that is regularly saturated by surface or ground water and subsequently is characterized by a prevalence of vegetation that is adapted for life in saturated soil conditions. Examples include: swamps, bogs, fens, marshes, and estuaries.

Wildlife Refuge: An area designated for the protection of wild animals, within which hunting and fishing are either prohibited or strictly controlled.

Wood-Burning Stove Pollution: Air pollution caused by emissions of particulate matter, carbon monoxide, total suspended particulates, and polycyclic organic matter from wood-burning stoves.

Working Level (WL): A unit of measure for documenting exposure to radon decay products. One working level is equal to approximately 200 picocuries per liter.

Working Level Month (WLM): A unit of measure used to determine cumulative exposure to radon.

X, Y, Z

Xenobiotic: Term for non-naturally occurring man-made substances found in the environment (i.e., synthetic material solvents, plastics.).

Zooplankton: Tiny aquatic animals eaten by fish.

Acronyms

A

AA: Adverse Action
AA: Advices of Allowance
AA: Assistant Administrator
AA: Associate Administrator
AA: Atomic Absorption
AAAS: American Association for the Advancement of Science
AAEE: American Academy of Environmental Engineers
AANWR: Alaskan Arctic National Wildlife Refuge
AAP: Affirmative Action Plan
AAP: Affirmative Action Program
AAP: Asbestos Action Program
AARC: Alliance for Acid Rain Control
ABES: Alliance for Balanced Environmental Solutions
AC: Actual Commitment
AC: Advisory Circular
AC: Alternating Current
A&C: Abatement and Control
ACA: American Conservation Association
ACBM: Asbestos-Containing Building Material
ACE: Alliance for Clean Energy
ACEEE: American Council for an Energy Efficient Economy
ACFM: Actual Cubic Feet Per Minute
ACL: Alternate Concentration Limit
ACL: Analytical Chemistry Laboratory
ACM: Asbestos-Containing Material
ACP: Air Carcinogen Policy
ACQUIRE: Aquatic Information Retrieval
ACQR: Air Quality Control Region
ACS: American Chemical Society
ACT: Action
ACTS: Asbestos Contractor Tracking System
ACWA: American Clean Water Association
ADABA: Acceptable Data Base
ADB: Applications Data Base
ADI: Acceptable Daily Intake
ADQ: Audits of Data Quality
ADP: Applications Data Base
ADR: Alternate Dispute Resolution
ADSS: Air Data Screening System
ADT: Average Daily Traffic
AEA: Atomic Energy Act
AEC: Associate Enforcement Counsels (OECM)
AEE: Alliance for Environmental Education
AEERL: Air and Energy Engineering Research Laboratory
AEM: Acoustic Emmision Monitoring
AERE: Association of Environmental and Resource Economists
AES: Auger Electron Spectometry
AFCA: Area Fuel Consumption Allocation
AFRCE: Air Force Regional Civil Engineers
AFS: AIRS Facility Subsystem
AFUG: AIRS Facility Users Group
AGC: Associate General Counsels (OGC)
AH: Allowance Holders
AHERA: Asbestos Hazard Emergency Response Act
AI: Artificial Intelligence
AICE: American Institute of Chemical Engineers
AICUZ: Air Installation Compatible Use Zones
AID: Agency for International Development
AIG: Assistant Inspector General
AIHC: American Industrial Health Council
AIP: Auto Ignition Point
AIRS: Aerometric Information Retrieval System
AL: Acceptable Level
AL: Administrative Leave
AL: Annual Leave
ALA: American Lung Association
ALA: Delta-Aminolevulinic Acid
ALA-O: Delta-Aminolevulinic Acid Dehydrates
ALAPO: Association of Local Air Pollution Control Officers
ALARA: As Low As Reasonably Achievable
ALC: Application Limiting Constituent
ALJ: Administrative Law Judge
ALMS: TALMS without the tunable
ALR: Action Leakage Rate
AMA: American Medical Association
AMBIENS: Atmospheric Mass Balance of Industrially Emitted and Natural Sulfur (experimental investigation by the MAP3S Community)
AMPS: Automatic Mapping and Planning System
AMS: American Meteorological Society
AMSA: Association of Metropolitan Sewer Agencies
ANPR: Advance Notice of Proposed Rulemaking
ANSS: American Nature Study Society
AO: Administrative Officer
AO: Administrator's Office
AO: Administrative Order (on consent)
AO: Area Office
AO: Awards and Obligations
AOC: Abnormal Operating Conditions
AOD: Argon-Oxygen Decarbonization
AOML: Atlantic Oceanographic and Meteorological Laboratory
AP: Accounting Point
APA: Administrative Procedures Act
APCA: Air Pollution Control Association
APCD: Air Pollution Control District
APDS: Automated Procurement Documentation System
APHA: American Public Health Association
APRAC: Urban Diffusion Model for Carbon Monoxide from Motor Vehicle Traffic
APT: Associated Pharmacists and Toxicologists
APTI: Air Pollution Training Institute
APWA: American Public Works Association
AQ-7: Non-reactive Pollutant Modeling
AQCCT: Air Quality Criteria and Control Techniques
AQCR: Air Quality Control Region (CAA)
AQD: Air Quality Digest
AQDHS: Air Quality Data Handling System (OAR)
AQDM: Air Quality Display Model
AQMA: Air Quality Maintenance Area
AQMP: Air Quality Maintenance Plan
AQMP: Air Quality Management Plan
AQSM: Air Quality Simulation Model
AQTAD: Air Quality Technical Assistance Demonstration
A&R: Air and Radiation
ARA: Assistant Regional Administrator
ARA: Associate Regional Administrator
ARAR: Applicable or Relevant and Appropriate Standards, Limitations, Criteria, and Requirements
ARB: Air Resources Board
ARC: Agency Ranking Committee:
ARCC: American Rivers Conservation Council
ARG: American Resources Group
ARIP: Accidental Release Information Program
ARM: Air Resources Management
ARO: Alternate Regulatory Option
ARRP: Acid Rain Research Program
ARRPA: Air Resources Regional Pollution Assessment Model
ARZ: Auto-restricted Zone
AS: Area Source
ASC: Area Source Category
ASCII: American Standard Code for Information Interchange
ASDWA: Association of State Drinking Water Administrators
ASHAA: Asbestos in Schools Hazard Abatement Act:
ASIWCPA: Association of State and Interstate Water Pollution Control Administrators
ASMDHS: Airshed Model Data Handling System
ASRL: Atmospheric Sciences Research Laboratory
ASTHO: Association of State and Territorial Health Officers ASTSWMO: Association of State and Territorial Solid Waste Management Officials
AT: Advanced Treatment (water)
ATERIS: Air Toxics Exposure and Risk Information System (ORD)
ATS: Action Tracking System
ATS: Administrator's Tracking System
ATSDR: Agency for Toxic Substances and Disease Registry (HHS)
ATTF: Air Toxics Task Force
AUSA: Assistant United States Attorney
AUSM: Advanced Utility Simulation Model
A/WPR: Air/Water Pollution Report
AWRA: American Water Resources Association
AWWA: American Water Works Association
AWWARF: American Water Works Association Research Foundation AX: Administrator's Office

B

BAA: Board of Assistance Appeals (OGC)
BAC: Biotechnology Advisory Committee
BACT: Best Available Control Technology
BADT: Best Available Demonstrated Technology
BaP: Benzo(a)Pyrene
BAP: Benefits Analysis Program
BART: Best Available Retrofit Technology
BASIS: Battelles Automated Search Information System
BAT: Best Available Treatment
BATEA: Best Available Technology Economically Achievable
BBS: Bulletin Board System
BCC: Blind Carbon Copy
BCCM: Board for Certified Consulting Meteorologists
BCT: Best Control Technology
BCT: Best Conventional Pollutant Control Technology
BDAT: Best Demonstrated Achievable Technology
BDT: Best Demonstrated Technology
BEJ: Best Expert Judgment
BEP: Black Employment Program
BG: Billion Gallons
BI: Brookings Institution
BIA: Bureau of Indian Affairs
BID: Background Information Document
BID: Buoyancy Induced Dispersion
BIOPLUME: Model to Predict the Maximum Extent of Existing Plumes
BLM: Bureau of Land Management:
BLOB: Biologically Liberated Organo-Beasties
BLS: Bureau of Labor Statistics
BMP: Best Management Practice(s)
BMR: Baseline Monitoring Report (CWA)
BOD: Biochemical Oxygen Demand
BOD: Biological Oxygen Demand
BOF: Basic Oxygen Furnace
BOM: Bureau of Mines
BOP: Basic Oxygen Process
BOPF: Basic Oxygen Process Furnace
BOYSNC: Beginning of Year Significant Non Compliers
BP: Boiling Point

BPA: Blanket Purchase Agreement
BPJ: Best Professional Judgment
BPT: Best Practicable Technology
BPT: Best Practicable Control Technology
BPT: Best Practicable Treatment

BRS: Bibliographic Retrieval Service
BSO: Benzene Soluble Organics
BTU: British Thermal Unit
BTZ: Below the Treatment Zone
BU: Bargaining Unit
BUN: Blood Urea Nitrogen
BY: Budget Year

C

C: Celsius
CA: Citizen Act
CA: Competition Advocate
CA: Cooperative Agreements
CA: Corrective Action
CAA: Clean Air Act
CAA: Compliance Assurance Agreement
CAAA: Clean Air Act Amendments
CAB: Civil Aeronautics Board
CAD: Computer Assisted Design
CAER: Community Awareness and Emergency Response
CAFE: Corporate Average Fuel Economy
CAFO: Consent Agreement/Final Order
CAG: Carcinogenic Assessment Group
CAIR: Comprehensive Assessment of Information Rule
CALINE: California Line Source Model
CAMP: Continuous Air Monitoring Program
CAN: Common Account Number
CAO: Corrective Action Order
CAP: Corrective Action Plan
CAP: Cost Allocation Procedure
CAP: Criteria Air Pollutant
CAR: Corrective Action Report
CASAC: Clean Air Scientific Advisory Committee
CAS: Center for Automotive Safety
CAS: Chemical Abstract Service
CASLP: Conference on Alternative State and Local Practices
CATS: Corrective Action Tracking System
CAU: Carbon Adsorption Unit
CAU: Command Arithmetic Unit
CB: Continuous Bubbler
CBA: Chesapeake Bay Agreement
CBA: Cost Benefit Analysis
CBD: Central Business District
CBD: Commerce Business Daily
CBI: Compliance Biomonitoring Inspection (CWA)
CBI: Confidental Business Information
CBO: Congressional Budget Office
CBOD: Carbonaceous Biochemical Oxygen Demand
CBP: Chesapeake Bay Program
CBP: County Business Patterns
CC: Carbon Copy
CCA: Competition in Contracting Act
CCAA: Canadian Clean Air Act
CCAP: Center for Clean Air Policy
CCEA: Conventional Combustion Environmental Assessment
CCHW: Citizens Clearinghouse for Hazardous Wastes
CCID: Confidential Chemicals Identification System
CCMS/NATO : Committee on Challenges of a Modern Society/North Atlantic Treaty Organization
CCP: Composite Correction Plan (CWA)
CC/RTS: Chemical Collection/Request Tracking System
CCTP: Clean Coal Technology Program
CD: Climatological Data
CDB: Consolidated Data Base
CDBA: Central Data Base Administrator
CDC: Centers for Disease Control (HHS)
CDD: Chlorinated dibenzo-p-dioxin
CDF: Chlorinated dibenzofuran
CDHS: Comprehensive Data Handling System (OAR)
CDI: Case Development Inspection
CDM: Climatological Dispersion Model
CDM: Comprehensive Data Management
CDMQC: Climatological Dispersion Model with Calibration and Source Contribution
CDNS: Climatological Data National Summary
CDP: Census Designated Places
CDS: Compliance Data System
CE: Categorical Exclusion
CE: Cost Effectiveness
CEA: Cooperative Enforcement Agreement
CEA: Cost and Economic Assessment (OECM)
CEA: Council of Economic Advisors
CEAT: Contractor Evidence Audit Team
CEARC: Canadian Environmental Assessment Research Council
CEB: Chemical Element Balance
CEC: Commission of European Communities
CECATS: CSB Existing Chemicals Assessment Tracking System (OPTS)
CEE: Center for Environmental Education
CEEM: Center for Energy and Environmental Management
CEI: Compliance Evaluation Inspection (CWA)
CELRF: Canadian Environmental Law Research Foundation
CEM: Continuous Emission Monitoring (CAA)
CEMS: Continuous Emission Monitoring System
CEO: Chief Executive Officer
CEPP: Chemical Emergency Preparedness Plan
CEQ: Council on Environmental Quality
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System (OSWER)
CERI: Center for Environmental Research Information
CERT: Certificate of Eligibility
CEU: Continuing Education Units
CF: Conservation Foundation
CFA: Consumer Federation of American
CFC: Chlorofluorocarbons
CFM: Chlorofluoromethanes
CFM: Cubic Feet Per Minute (ft. 3/min. preferred except with ACFM or SCFM)
CFR: Code of Federal Regulations
CFS: Cubic feet per second
CHABA: Committee on Hearing and Bio-Acoustics
CHAMP: Community Health Air Monitoring Program
CHEMTREC: Chemical Transportation Emergency Center
CHESS: Community Health and Environmental Surveillance System
CHIP: Chemical Hazard Information Profile
CI: Compression Ignition
CI: Confidence Interval
CIAQ: Council on Indoor Air Quality
CIBL: Convective Internal Boundary Layer
CICA: Competition in Contracting Act
CICIS: Chemicals in Commerce Information System
CIDRS: Cascade Impactor Data Reduction System
CIMI: Committee on Integrity and Management Improvement
CIS: Chemical Information System
CIS: Contracts Information Systemi
CJE: Critical Job Element
CJO: Chief Judicial Officer
CLC: Capacity Limitng Constituents
CLEANS: Clinical Laboratory for Evaluation and Assessment of Toxic Substances
CLEVER: Clinical Laboratory for Evaluation and Validation of Epidemiologic Research
CLF: Conservation Law Foundation
CLIPS: Chemical List Index and Processing System
CLP: Contract Laboratory Program
CM: Corrective Measure
CMA: Chemical Manufacturers Association
CMB: Chemical Mass Balance
CME: Comprehensive (ground water) Monitoring Evaluation
CMEL: Comprehensive (ground water) Monitoring Evaluation Log
CMEP: Critical Mass Energy Project
COCO: Contractor-Owned/Contractor-Operated
COD: Chemical Oxygen demand
COE: U.S. Army Corps of Engineers
COH: Coefficient of Haze
CONG: Congressional Committee
CPF: Carcinogenic Potency Factor
CPI: Consumer Price Index
CPO: Certified Project Officer
CPR: Center for Public Resources
CPSC: Consumer Product Safety Commission
CQA: Construction Quality Assurance
CR: Community Relations
CROP: Consolidated Rules of Practice
CRR: Center for Renewable Resources
CRS: Congressional Research Service
CRSTER: Single Source Dispersion Model
CSI: Clean Sites, Inc.
CSI: Compliance Sampling Inspection (CWA)
CSIN: Chemical Substances Information Network
CSMA: Chemical Specialties Manufacturers Association
CSO: Combined Sewer Overflow
CSPA: Council of State Planning Agencies
CSPI: Center for Science in the Public Interest
CSRL: Center for the Study of Responsive Law
CTARC: Chemical Testing and Assessment Research Commission
CW: Congress Watch
CWA: Clean Water Act (aka FWPCA)
CWAP: Clean Water Action Project
CWTC: Chemical Waste Transportation Council

D

DA: Deputy Administrator
DAR: Defense Acquisition Regulations
dB: Decibel
DCA: Document Control Assistant
DCO: Delayed Compliance Order (CAA)
DCO: Document Control Officer
DDT: D(lchloro)D(lphebyl)T(Richloroethane)
DES: Diethylstilbesterol
DI: Diagnostic Inspection (CWA)
DMR: Discharge Monitoring Report
DNA: Deoxyribonucleic acid
DO: Dissolved Oxygen
DOC: Department of Commerce
DOD: Department of Defense
DOE: Department of Energy
DOI: Department of Interior
DOJ: Department of Justice
DOL: Department of Labor
DOS: Department of State
DOT: Department of Transportation
DOW: Defenders of Wildlife
DPA: Deepwater Ports Act
DQO: Data Quality Objective
DRA: Deputy Regional Administrator
DRC: Deputy Regional Counsel
DRMS: Defense Reutilization and Marketing Service
DS: Dichotomous Sampler
DSAP: Data Self Auditing Program

DSCF: Dry Standard Cubic Feet
DSCM: Dry Standard Cubic Meter
DSS: Decision Support System
DSS: Domestic Sewage Study
DT: Detention Time
DU: Decision Unit
DU: Ducks Unlimited
DUC: Decision Unit Coordinator:
DWS: Drinking Water Standard

E

EA: Endangerment Assessment
EA: Enforcement Agreement
EA: Environmental Action
EA: Environmental Assessment (NEPA)
EA: Environmental Audit
EAF: Electric Arc Furnaces
EAG: Exposure Assessment Group (ORD)
EAP: Environmental Action Plan
EAR: Environmental Auditing Roundtable
EB: Emissions Balancing
EBCDIC: Extended Binary Coded Decimal Interchange Code
EC: European Community (Common Market)
EC: Environment Canada
EC: Effective Concentration
ECA: Economic Community for Africa
ECAP: Employee Counseling and Assistance Program
ECD: Electron Capture Detector
ECE: Economic Commission for Europe
ECHH: Electro-Catalytic Hyper-Heaters
ECL: Environmental Chemical Laboratory
ECL: Executive Control Language
ECLA: Economic Commission for Latin America
ECRA: Economic Cleaup Responsibility Act
ED: Department of Education
ED: Effective Dose
EDA: Economic Development Administration
EDA: Emergency Declaration Area
EDB: Ethylene Dibromide
EDC: Ethylene Dichloride:
EDD: Enforcement Decision Document
EDF: Environmental Defense Fund
EDP: Electronic Data Processing
EDRS: Enforcement Document Retrieval System
EDS: Electronic Data System
EDS: Energy Data System
EDT: Edit Data Transmission
EDTA: Ethylene Diamine Triacetic Acid
EDZ: Emission Density Zoning
EEA: Energy and Environmental Analysis
EEC: European Economic Commission
EEG: Electroencephalogram
EEI: Edison Electric Institute
EENET: Emergency Education Network (FEMA)
EEOC: Equal Employment Opportunity Commission
EER: Excess Emission Report
EERL: Eastern Environmental Radiation Laboratory:
EESI: Environment and Energy Study Institute
EESL: Environmental Ecological and Support Laboratory
EERU: Environmental Emergency Response Unit
EETFC: Environmental Effects, Transport and Fate Committee
EF: Emission Factor
EFO: Equivalent Field Office
EFTC: European Fluorocarbon Technical Committee
EGR: Exhaust Gas Recirculation
EH: Redox Potential
EHC: Environmental Health Committee (SAB)
EHS: Extremely Hazardous Substance
EI: Emissions Inventory
EIA: Economic Impact Assessment
EIA: Environmental Impact Assessment
EIL: Environmental Impairment Liability
EIR: Endangerment Information Report
EIR: Environmental Impact Report
EIS: Environmental Inventory System
EIS: Environmental Impact Statement (NEPA)
EIS/AS: Emissions Inventory System/Area Source
EIS/PS: Emissions Inventory System/Point Source
EKMA: Empirical Kinetic Modeling Approach
EL: Exposure Level
ELI: Environmental Law Institute
ELR: Environmental Law Reporter
EM: Electromagnetic Conductivity
EM: Electron Microscope
E-MAIL: Electronic Mail
EMAS: Enforcement Management and Accountability System (OECM)
EMI: Emergency Management Institute
EMR: Environmental Management Report
EMS: Enforcement Management System
EMSL: Environmental Monitoring Support Laboratory
EMSL: Environmental Monitoring Systems Laboratory
EMTS: Environmental Monitoring Testing Site
EMTS: Exposure Monitoring Test Site
EO: Ethylene Oxide
EO: Executive Officer
EO: Executive Order
EOB: Executive Office Building
EOC: Emergency Operating Center
EOD: Entrance on Duty
EOE: Equal Opportunity Employer
EOJ: End of Job
EOP: Emergency Operations Plan
EOT: Emergency Operations Team
EOY: End of Year
EP: Earth Protectors
EP: Environmental Profile
EP: Extraction Procedure
EPA: U.S. Environmental Protection Agency
EPAA: Environmental Programs Assistance Act:
EPAAR: EPA Acquisition Regulations
EPACASR: EPA Chemical Activities Status Report
EPAYS: EPA Payroll System
EPCA: Energy Policy and Conservation Act
EPD: Emergency Planning District
EPI: Environmental Policy Institute
EPIC: Environmental Photographic Interpretation Center
EPNL: Effective Perceived Noise Level
EPO: Estuarine Programs Office (NOAA)
EPRI: Electric Power Research Institute
EPTC: Extraction Procedure Toxicity Characteristic
ER: Electrical Resistivity
ERA: Economic Regulatory Agency
ERAMS: Environmental Radiation Ambient Monitoring System (OAR)
ERC: Emergency Response Commission
ERC: Emissions Reduction Credit
ERC: Environmental Research Center
ERCS: Emergency Response Cleanup Services
ERDA: Energy Research and Development Administration
ERD&DAA: Environmental Research, Development and Demonstration Authorization Act
ERL: Environmental Research Laboratory
ERNS: Emergency Response Notification System
ERP: Enforcement Response Policy
ERT: Emergency Response Team
ERTAQ: ERT Air Quality Model
ES: Enforcement Strategy
ESA: Endangered Species Act
ESA: Environmentally Sensitive Area
ESC: Endangered Species Committee
ESCA: Electron Spectroscopy for Chemical Analysis
ESCAP: Economic and Social Commission for Asia and the Pacific
ESECA: Energy Supply and Environmental Coordination Act
ESH: Environmental Safety and Health
ESP: Electrostatic Precipitators
ET: Emissions Trading
ETP: Emissions Trading Policy
ETS: Environmental Tobacco Smoke
EWCC: Environmental Workforce Coordinating Committee
EX: Executive Level Appointment
ExEx: Expected Exceedance
EUP: Environmental Use Permit

F

F: Fahrenheit (Degrees)
FAA: Federal Aviation Administration
FACA: Federal Advisory Committee Act
FACM: Friable Asbestos-Containing Material
FAM: Friable Asbestos Material
FAME: Framework for Achieving Managerial Excellence
FAN: Fixed Account Number
FAO: Food and Agriculture Organization
FAR: Federal Acquisition Regulations
FASB: Financial Accounting Standards Board
FATES: FIFRA and TSCA Enforcement System
FBC: Fluidized bed combustion
FCC: Federal Communications Commission
FCC: Fluid Catalytic Convert
f/cc: Fibers per cubic centimeters (of air)
FCCU: Fluid Catalytic Cracking Unit
FCO: Federal Coordinating Officer (in disaster areas)
FCO: Forms Control Officer
FDA: Food and Drug Administration
FDF: Fundamentally Different Factors
FDIC: Federal Deposit Insurance Corporation
FDL: Final Determination Letter
FDO: Fee Determination Official
FE: Fugitive Emissions
FEA: Federal Energy Administration
FEC: Federal Executive Council
FEDS: Federal Energy Data System
FEFx: Forced Expiratory Flow
FEHB: Federal Employees Health Benefits
FEI: Federal Executive Institute
FEIS: Fugitive Emissions Information Systemyu
FEL: Frank Effect Level
FEMA: Federal Emergency Management Agency
FEMA-REP-1: Response Plans and Preparedness in Support of Nuclear Power Plants
FEMA-REP-2: Guidance for Developing State and Local Radiological Emergency Response Plans and Preparedness for Transportation Actions
FERC: Federal Energy Regulatory Commission
FERSA: Federal Employee Retirement System Act
FES: Factor Evaluation System
FEV: Forced Expiratory Volume
FEV1: Forced Expiratory Volume - one second
FEVI: Front End Volatility Index
FEW: Federally Employed Women
FF: Federal Facilities
FFF: Firm Financial Facility
FFAR: Fuel and Fuel Additive Registration
FFDCA: Federal Food, Drug, and Cosmetic Act
FFFSG: Fossil Fuel Fired Steam Generator
FFIS: Federal Facilities Information System
FFP: Firm Fixed Price
FGD: Flue Gas Desulfurization
FHA: Farmers Home Administration

FHA: Federal Housing Administration
FHLBB: Federal Home Loan Bank Board
FHWA: Federal Highway Administration
FIA: Federal Insurance Administration
FIC: Federal Information Center
FICA: Federal Insurance Contributions Act
FID: Flame Ionization Detector
FIFO: First In/First Out
FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act
FIM: Friable Insulation Material
FINDS: Facility Index System (OIRM)
FIP: Federal Implementation Plan
FIP: Federal Information Plan
FIP: Final Implementation Plan
FIPS: Federal Information Procedures System
FIT: Field Investigation Team
FLETC: Federal Law Enforcement Training Center
FLM: Federal Land Manager
FLPMA: Federal Land Policy and Management Act
FLSA: Fair Labor Standards Act
FLP: Flash Point
FM: Friable Material
F/M: Food to Microorganism Ratio
FMC: Federal Maritime Commission
FMFIA: Federal Managers Financial Integrity Act
FML: Flexible Membrane Liner
FMO: Financial Management Officer
FMP: Facility Management Plan
FMP: Financial Management Plan
FMS: Financial Management System
FMVCP: Federal Motor Vehicle Control Program
FOE: Friends of the Earth
FOIA: Freedom of Information Act
FOISD: Fiber Optic Isolated Spherical Dipol Antenna
FONSI: Finding of No Significant Impact (NEPA)
FORAST: Forest Response to Anthropogenic Stress
FORTRAN: Formula Translation
FP: Fine Particulate
FPA: Federal Pesticide Act
FPC: Federal Power Commission
FPD: Flame Photometric Detector
FPEIS: Fine Particulate Emissions Information System
FPM: Federal Personnel Manual
FPR: Federal Procurement Regulation
FPRS: Federal Program Resources Statement
FPRS: Formal Planning and Supporting System
FR: Federal Register
FR: Final Rulemaking
FRA: Federal Register Act
FRB: Federal Reserve Board
FRC: Federal Records Center
FRDS: Federal Reporting Data System
FREDS: Flexible Regional Emissions Data System
FRES: Forest Range Environmental Study
FRM: Federal Reference Methods
FRN: Final Rulemaking Notice
FRS: Formal Reporting System
FRTIB: Federal Retirement Thrift Investment Board
FS: Feasibility Study
FS: Forest Service
FSA: Food Security Act
FSS: Facility Status Sheet
FSS: Federal Supply Schedule
FT: Full Time
FTC: Federal Trade Commission
FTE: Full Time Equivalent
FTP: Federal Test Procedure (for motor vehicles)
FTS: Federal Telecommunications System
FTS: File Transfer Service
FTT: Full-Time Temporary
FUA: Fuel Use Act
FURS: Federal Underground Injection Control Reporting System
FVC: Forced Vital Capacity
FVMP: Federal Visibility Monitoring Program
FWCA: Fish and Wildlife Coordination Act
FWP: Federal Women's Program
FWPCA: Federal Water Pollution Control Act (aka Clean Water Act, or CWA)
FWPCA: Federal Water Pollution Control Administration
FWS: Fish and Wildlife Service
FY: Fiscal Year
FYI: For Your Information

G

GAAP: Generally Accepted Accounting Principles
GAC: Ground-Water Activated Carbon
GACT: Granular Activated Carbon Treatment
GAO: General Accounting Office
GBL: Government Bill of Lading
GC: Gas Chromatograph
GC: General Counsel
GC/MS: Gas Chromatograph/Mass Spectograph
GCWR: Gross Combination Weight Rating
GEA: Glossary of EPA Acronyms
GEI: Geographic Enforcement Initiative
GEMS: Global Environmental Monitoring System
GEMS: Graphical Exposure Modeling System (OTS)
GEP: Good Engineering Practice
GF: General Files
GFF: Glass Fiber Filter
GFP: Government-Furnished Property
GI: Gastrointestinal
GICS: Grant Information and Control System
GIS: Geographic Information Systems
GIS: Global Indexing System
GLC: Gas Liquid Chromatography
GLERL: Great Lakes Environmental Research Laboratory
GLNPO: Great Lakes National Program Office
GLP: Good Laboratory Practices
GLWQA: Great Lakes Water Quality Agreement
GMCC: Global Monitoring for Climatic Change
g/mi: Grams per mile
GMT: Greenwich Mean Time
GNP: Gross National Product
GOCM: Goals, Objectives, Commitments, and Measures
GOCO: Goverment-Owned/Contractor-Operated
GOGO: Goverment-Owned/Government-Operated
GOP: General Operating Procedures
GOPO: Goverment-Owned/Privately-Operated
GPAD: Gallons per acre per day
GPG: Grams per Gallon
GPO: Government Printing Office
GPR: Ground-Penetrating Radar
GPS: Ground-Water Protection Strategy
GRGL: Ground-Water Residue Guidance Level
GS: General Schedule
GSA: General Services Administration
GTN: Global Trend Network
GTR: Government Transportation Request
GVP: Gasoline Vapor Pressure
GVW: Gross Vehicle Weight
GVWR: Gross Vehicle Weight Rating
GW: Ground Water
GWM: Ground-Water Monitoring
GWPS: Ground-Water Protection Standard
GWPS: Ground-Water Protection Strategy

H

HAD: Health Assessment Document
HAP: Hazardous Air Pollutant
HAPEMS: Hazardous Air Pollutant Enforcement Management System
HAPPS: Hazardous Air Pollutant Prioritization System
HATREMS: Hazardous and Trace Emissions System
HAZMAT: Hazardous Material
HAZOP: Hazard and Operability Study
HB: Health Benefits
HBEP: Hispanic and Black Employment Programs
HC: Hazardous Constituents
HCCPD: Hexachlorocyclopentadiene
HCP: Hypothermal Coal Process
HDD: Heavy-Duty Diesel
HDE: Heavy-Duty Engine
HDG: Heavy-Duty Gasoline-Powered Vehicle
HDPE: High Density Polyethelene
HDT: Heavy-Duty Truck
HDV: Heavy-Duty Vehicle
HEAL: Human Exposure Assessment Location
HECC: House Energy and Commerce Committee
HEI: Health Effects Institute
HEM: Human Exposure Modeling
HEP: Hispanic Employment Program
HEPA: High-Efficiency Particulate Air
HERL: Health Effects Research Laboratory
HERS: Hyperion Energy Recovery System
HEX-BCH: Hexachloronorbornadiene
HHE: Human Health and the Environment
HHS: Department of Health and Human Services Formerly HEW
HHV: Higher Heating Value
HI: Hazard Index
HI-VOL: High-Volume Sampler
HIWAY: A Line Source Model for Gaseous Pollutants
HLRW: High-Level Radioactive Waste
HMIS: Hazardous Materials Information System
HMS: Highway Mobile Source
HMTA: Hazardous Materials Transportation Act
HMTR: Hazardous Materials Transportation Regulations
HO: Headquarters Offices
HOC: Halogenated Organic Carbons
HON: Hazardous Organic NESHAP
HOV: High-Occupancy Vehicle
HP: Horse Power
HPLC: High Performance Liquid Chromatography
HPV: High Priority Violater
HQ: Headquarters
HQCDO: Headquarters Case Development Officer
HRC: Human Resources Council
HRS: Hazardous Ranking System
HRUP: High Risk Urban Problem
HSDB: Hazardous Substance Data Base
HSL: Hazardous Substance List
HSWA: Hazardous and Solid Waste Amendments
HT: Hypothermally Treated
HTP: High Temperature and Pressure
HUD: Department of Housing and Urban Development
HVAC: Heating, Ventilation, and Air Conditioning (System)
HVIO: High Volume Industrial Organics
HW: Hazardous Waste
HWDMS: Hazardous Waste Data Management System (OSWER)
HWERL: Hazardous Waste Engineering Research Laboratory
HWGTF: Hazardous Waste Ground Water Task Force

HWGTF: Hazardous Waste Ground Water Test Facility
HWLT: Hazardous Waste Land Treatment
HWM: Hazardous Waste Managment
HWRTF: Hazardous Waste Restrictions Task Force
HWTC: Hazardous Waste Treatment Council

I

IA: Interagency Agreeement
IAAC: Interagency Assessment Advisory Committee
IAEA: International Atomic Energy Agency
IAG: Interagency Agreement
IAP: Incentive Awards Program
IAP: Indoor Air Pollution
IARC: International Agency for Research on Cancer
IARDB: Interim Air Toxics Data Base
IBA: Industrial Biotechnology Association
IBRD: International Bank for Reconstruction and Development
ICAIR: Interdisciplinary Planning and Information Research
ICAP: Inductively Coupled Argon Plasma
ICBN: International Commission on the Biological Effects of Noise
ICC: Interstate Commerce Commission
ICE: Industrial Combustion Emissions Model
ICE: Internal Combustion Engine
ICP: Inductively Coupled Plasma
ICR: Information Collection Request
ICRE: Ignitability, Corrosivity, Reactivity, Extraction (Characteristics)
ICRP: International Commission on Radiological Protection
ICS: Institute for Chemical Studies:
ICS: Intermittent Control Strategies
ICS: Intermittent Control System (CAA)
ICWM: Institute for Chemical Waste Management
ID: Inside Diameter
IDLH: Immediately Dangerous to Life and Health:
IEB: International Environment Bureau
IEMP: Integrated Environmental Management Project
IES: Institute for Environmental Studies
IFB: Invitation for Bid
IFCAM: Industrial Fuel Choice Analysis Model
IFIS : Industry File Information System
IFPP: Industrial Fugitive Process Particulate
IG: Inspector General
IGCI: Industrial Gas Cleaning Institute
IIS: Inflationary Impact Statement
IJC: International Joint Commission (on Great Lakes)
I/M: Inspection/Maintenance
IMM: Intersection Midblock Model
IMPACT: Integrated Model of Plumes and Atmosphere in Complex Terrain
IMPROVE: Interagency Monitoring of Protected Visual Environment
INPUFF: A Gaussian Puff Dispersion Model
INT: Intermittent
IO: Immediate Office
IOAA: Immediate Office of the Assistant Administrator
IOAU: Input/Output Arithmetic Unit
IOB: Iron Ore Beneficiation
IOU: Input/Output Unit
IP: Inhalable Particles
IPA: Intergovernmental Personnel Act
IPA: Intergovernmental Personnel Agreement
IPM: Inhalable Particulate Matter
IPM: Integrated Pest Management
IPP: Implementation Planning Program
IPP: Integrated Plotting Package
IPP: Intermedia Priority Pollutant (document)
IPCS: International Program on Chemical Safety
IR: Infrared
IRG: Interagency Review Group
IRIS: Instructional Resources Information System
IRIS: Integrated Risk Information System
IRM: Intermediate Remedial Measures (CERCLA)
IRMC: Inter-Regulatory Risk Management Council
IRP: Installation Restoration Program
IRPTC: International Register of Potentially Toxic Chemicals
IRR: Institute of Resource Recovery
IRS: Internal Revenue Service
IRS: International Referral Systems
IS: Interim Status
ISAM: Indexed Sequential File Access Method
ISC: Industrial Source Complex
ISCL: Interim Status Compliance Letter
ISCLT: Industrial Source Complex Long Term Model
ISCST: Industrial Source Complex Short Term Model
ISD: Interim Status Document (RCRA)
ISE: Ion-specific electrode
ISMAP: Indirect Source Model for Air Pollution
ISS: Interim Status Standards
ITC: Interagency Testing Committee
ITC: International Trade Commission
ITDP: Individual Training and Development Plan
ITP: Individual Training Plan
IWC: In-Stream Waste Concentration (CWA)
IWS: Ionizing Wet Scrubber

J

JAPCA: Journal of Air Pollution Control Association
JCL: Job Control Language
JEC: Joint Economic Committee
JLC: Justification for Limited Competition
JNCP: Justification for Non-Competitive Procurement
JOFOC: Justification for Other Than Full and Open Competition
JPA: Joint Permitting Agreement
JSD: Jackson Structured Design
JSP: Jackson Structured Programming
JTU: Jackson Turbidity Unit

K

KW: Kilowatt
KWH: Kilowatt Hour

L

LAA: Lead Agency Attorney
LAER: Lowest Achievable Emission Rate
LAI: Laboratory Audit Inspection
LAMP: Lake Acidification Mitigation Project (EPRI)
LC: Lethal Concentration
LC: Liquid Chromatography
LCD: Local Climatological Data
LCL: Lower Control Limit
LCM: Life Cycle Management
LCRS: Leachate Collection and Removal System
LD: Land Disposal
LD: Light Duty
LD50: Low Dose Where Fifty Percent of Animals Die
LDC: London Dumping Convention
LDCRS: Leachate Detection, Collection, and Removal System
LDD: Light-Duty Diesel
LDIP: Laboratory Data Integrity Program
LDR: Land Disposal Restrictions
LDRTF: Land Disposal Restrictions Task Force
LDS: Leak Detection System
LDT: Light-Duty Truck
LDV: Light-Duty Vehicle
LEL: Lower Explosive Limit
LEP: Laboratory Evaluation Program
LEPC: Local Emergency Planning Committee
LERC: Local Emergency Response Committee
LFL: Lower Flammability Limit
LIDAR: Light Detection and Ranging
LIFO: Last In/First Out
LIMB: Limestone-Injection, Multi-Stage Burner
LLRW: Low Level Radioactive Waste
LMFBR: Liquid Metal Fast Breeder Reactor
LMR: Labor Management Relations
LNEP: Low Noise Emission Product
LNG: Liquified Natural Gas
LOAFL: Lowest Observed Adverse Effect Level
LOC: Library of Congress
LOE: Level of Effort
LOEL: Lowest Observed Effect Level
LOIS: Loss of Interim Status (SDWA)
LONGZ: Long-Term Terrain Model
LOQ: Level of Quantitation
LP: Legislative Proposal
LPG: Liquified Petroleum Gas
LSI: Legal Support Inspection (CWA)
LSL: Lump Sum Leave
LST: Low-Solvent Technology
LTA: Lead Trial Attorney
LTD: Land Treatment Demonstration
LTO: Landing-Takeoff Cycle
LTOP: Lease to Purchase
LTR: Lead Technical Representative
LTU: Land Treatment Unit
LUST: Leaking underground Storage Tank(s) (current usage omits the "L")
LWCF: Land and Water Conservation Fund:
LWOP: Lease with Option to Purchase:
LWOP: Leave Without Pay

M

MAB: Man and Biosphere Program
MADCAP: Model of Advection, Diffusion, and Chemistry for Air Pollution
MAER: Maximum Allowable Emission Rate
MAG: Management Advisory Group
MAPSS: Multistate Atmospheric Power Production Pollution Study
MAPPER: Maintaining, Preparing, and Producing Executive Reports
MAPSIM: Mesoscale Air Pollution Simulation Model
MARC: Mining and Reclamation Council
MATC: Maximum Allowable Toxicant Concentration
MBDA: Minority Business Development Agency
MBE: Minority Business Enterprises
MCA: Manufacturing Chemists Aassociation
MCEF: Mixed Cellulose Ester Filter
MCL: Maximum Contaminant Level
MCLG: Maximum Contaminant Level Goal
MCP: Municipal Compliance Plan (CWA)
MD: Mail Drop
MDA: Methylenedianilline
MDL: Method Detection Limit
MEFS: Midterm Energy Forecasting System
MEI: Maximum Exposed Individual:
MEK: Methyl Ethyl Ketone
MEM: Modal Emission Model
MENS: Mission Element Needs Statement

MEP: Multiple Extraction Procedure
MERL: Municipal Environmental Research Laboratory
MESOPAC: Mesoscale Meteurological Reprocesser Program
MESOPLUME: Mesoscale "Bent Plume" Model
MESOPUFF: Mesoscale Puff Model
MESS: Model Evaluation Support System
MFBI: Major Fuel Burning Installation
MFC: Metal Finishing Category
MGD: Million Gallons Per Day
MH: Man-Hours
MHD: Magnetohydrodynamics
MIBK: Methyl Isobutyl Ketone
MIC: Methyl Isocaynate
MICE: Management Information Capability for Enforcement
MICROMORT: A One-in-a-Million Chance of Death from an Environmental Hazard
MIPS: Millions of Instructions Per Second
MIS: Management Information System
MIS: Mineral Industry Surveys
MITS: Management Information Tracking System
ML: Meteorology Laboratory
ML: Military Leave
MLAP: Migrant Legal Action Program
MLSS: Mixed Liquor Suspended Solids
MLVSS: Mixed Liquor Volatile Suspended Solids
MMS: Minerals Management Service (DOI)
MMT: Million Metric Tons
MOA: Memorandum of Agreement
MOBILE: Mobile Source Emission Model
MOD: Miscellaneous Obligation Document
MOD: Modification
MOI: Memorandum of Intent
MOS: Margin of Safety
MOU: Memorandum of Understanding
MP: Melting Point
MPO: Metropolitan Planning Organization
MPP: Merit Promotion Plan
MPRSA: Marine Protection, Research and Sanctuaries Act
MPTDS: MPTER Model with Deposition and Setting of Pollutants
MPTER: Multiple Point Source Model with Terrain
MRA: Minimum Retirement Age
MRP: Multi-Roller Press (in sludge drying unit)
MS: Mail Stop
MS: Mass Spectrometry
MSA: Management System Audits
MSA: Metropolitan Statistical Areas
MSAM: Multi-Keyed Indexed Sequential File Access Method
MSDS: Material Safety Data Sheet
MSEE: Major Source Enforcement Effort
MSHA: Mine Safety and Health Administration (DOL)
MSIS: Model State Information System
MSL: Mean Sea Level
MSPB: Merit System Protection Board
MTB: Materials Transportation Bureau
MTBE: Methyl Tertiary Butyl Ether
MTD: Maximum Tolerated Dose
MTDDIS: Mesoscale Transport Diffusion and Deposition Model for Industrial Sources
MTG: Media Task Group
MTS: Management Tracking System (OW)
MTSL: Monitoring and Technical Support Laboratory
MTU: Mobile Treatment Unit
MVA: Multivariate Analysis
MVAPCA: Motor Vehicle Air Pollution Control Act
MVEL: Motor Vehicle Emissions Laboratory
MVI/M: Motor Vehicle Inspection/Maintenance
MVICSA: Motor Vehicle Information and Cost Savings Act
MVRS: Marine Vapor Recovery System
MVTS: Motor Vehicle Tampering Survey
MW: Megawatt
MW: Molecular Weight
MWC: Municipal Waste Combustor
MWG: Model Work Group
MWL: Municipal Waste Leachate
MYDP: Multi-Year Development Plans

N

NA: National Archives
NA: Nonattainment
N/A: Not Applicable
N/A: Not Available
NAA: Nonattainment Areas
NAAQS: National Ambient Air Quality Standards Program (CAA)
NAAS: National Air Audit System (OAR)
NACA: National Agricultural Chemicals Association
NADB: National Atmospheric Data Bank
NADP: National Atmospheric Deposition Program
NAIS: Neutral Administrative Inspection System
NALD: Nonattainment Areas Lacking Demonstrations
NAMA: National Air Monitoring Audits
NAMS: National Air Monitoring System
NANCO: National Association of Noise Control Officials
NAPAP: National Acid Precipitation Assessment Program
NAPBN: National Air Pollution Background Network
NAPBTAC: National Air Pollution Control Technical Advisory Committee
NAR: National Asbestos Registry
NARA: National Air Resources Act
NARA: National Archives and Records Administration
NARS: National Asbestos-Contractor Registry System
NAS: National Academy of Sciences
NAS: National Audubon Society
NASA: National Aeronautics and Space Administration
NATICH: National Air Toxics Information Clearinghouse
NAWC: National Association of Water Companies
NAWDEX: National Water Data Exchange
NBAR: Non-Binding Allocation of Authority
NBS: National Bureau of Standards
NCA: National Coal Association
NCA: Noise Control Act
NCAC: National Clean Air Coalition
NCAF: National Clean Air Fund
NCAMP: National Coalition Against the Misuse of Pesticides
NCAQ: National Commission on Air Quality
NCAR: National Center for Atmospheric Research
NCASI: National Council of the Paper Industry for Air and Stream Improvements
NCC: National Climatic Center
NCC: National Computer Center
NCF: Network Control Facility
NCHS: National Center for Health Statistics (NIH)
NCI: National Cancer Institute
NCIC: National Crime Information Center
NCLP: National Contract Laboratory Program
NCM: National Coal Model
NCM: Notice of Commencement of Manufacture (TSCA)
NCO: Negotiated Consent Order
NCP: National Contingency Plan (CERCLA)
NCP: Noncompliance Penalties (CAA)
NCP: Nonconformance Penalty
NCR: Noncompliance Report (CWA)
NCR: Nonconformance Report
NCRIC: National Chemical Response and Information Center
NCS: National Compliance Strategy
NCV: Nerve Conduction Velocity
NCVECS: National Center for Vehicle Emissions Control and Safety
NCWQ: National Commission on Water Quality
NDD: Negotiation Decision Document
NDDN: National Dry Deposition Network
NDIR: Nondispersive Infrared Analysis
NDS: National Dioxin Study
NDS: National Disposal Site
NDWAC: National Drinking Water Advisory Council
NEA: National Energy Act
NEDA: National Environmental Development Association
NEDS: National Emissions Data System
NEEC: National Environmental Enforcement Council (NAAG)
NEEJ: National Environmental Enforcement Journal (NAAG)
NEIC: National Enforcement Investigations Center
NEP: National Energy Plan
NEP: National Estuary Program
NEPA: National Environmental Policy Act
NER: National Emissions Report
NEROS: Northeast Regional Oxidant Study
NESCAUM: Northeast States for Coordinated Air Use Management
NESHAPS: National Emissions Standards for Hazardous Air Pollutants (CAA)
NETC: National Emergency Training Center
NETTING: Emission Trading Used to Avoid PSD/NSR Permit Review Requirements
NFAN: National Filter Analysis Network
NFFE: National Federation of Federal Employees
NFIP: National Flood Insurance Program
NFWF: National Fish and Wildlife Foundation
NGA: Natural Gas Association
NGPA: Natural Gas Policy Act
NGWIC: National Ground Water Information Center
NHANES: National Health and Nutrition Examination Study
NHPA: National Historic Preservation Act
NHTSA: National Highway Traffic Safety Act
NHTSA: National Highway Traffic Safety Administration (DOT)
NHWP: Northeast Hazardous Waste Project
NICS: National Institute for Chemical Studies
NIEHS: National Institute of Environmental Health Sciences
NIEI: National Indoor Environmental Institute
NIH: National Institutes of Health
NIM: National Impact Model
NIMBY: Not In My Backyard
NIOSH: National Institute of Occupational Safety and Health
NIPDWR: National Interim Primary Drinking Water Regulations
NIS: Noise Information System
NITEP: National Incinerator Testing and Evaluation Program
NLAP: National Laboratory Audit program
NLETS: National Law Enforcement Teletype Systems
NLM: National Library of Medicine
NLT: Not Later Than
NMC: National Meteorological Center
NMFS: National Marine Fisheries Service (DOC)
NMHC: Nonmethane Hydrocarbons
NMOC: Nonmethane Organic Compound
NMP: National Municipal Policy

NMR: Nuclear Magnetic Resonance
NNC: Notice of Noncompliance
NNPSPP: National Non-Point Source Pollution Program
NOA: New Obligation Authority
NOAA: National Oceanic and Atmospheric Administration (DOC)
NOAEL: No Observed Adverse Effect Level
NOC: Notice of Commencement
NOD: Notice of Deficiency (RCRA)
NOEL: No Observed Effects Level
NOHSCP: National Oil and Hazardous Substances Contingency Plan
NON: Notice of Noncompliance (TSCA)
NOPES: Non-Occupational Pesticide Exposure Study
NORA: National Oil Recyclers Association
NOS: National Ocean Survey (NOAA)
NOV: Notice of Violation
NOV/C/D: Notice of Violation/Compliance/Demand
NPAA: Noise Pollution and Abatement Act
NPCA: National Parks and Conservation Association
NPDES: National Pollutant Discharge Elimination System (CWA)
NPIRES: National Pesticide Information Retrieval System
NPL: National Priority List (CERCLA)
NPM: National Program Manager
NPN: National Particulate Network
NPRM: Notice of Proposed Rulemaking
NPS: National Park Service
NPS: National Permit Strategy
NPS: National Pesticide Survey (OW)
NPS: Non-Point Source
NPUG: National Prime User Group
NRA: National Recreation Area
NRC: National Research Council
NRC: National Response Center
NRC: Non-Reusable Containers
NRC: Nuclear Regulatory Commission
NRCA: National Resource Council of America
NRDC: Natural Resources Defense Council
NRT: National Response Team
NRWA: National Rural Water Association
NSC: National Security Council
NSDWR: National Secondary Drinking Water Regulations
NSF: National Sanitation Foundation
NSF: National Science Foundation
NSO: Nonferrous Smelter Orders (CAA)
NSPS: New Source Performance Standards (CAA)
NSR: New Source (Pre-construction) Review
NSTL: National Space Technology Laboratory
NSWMA: National Solid Waste Management Association
NSWS: National Surface Water Survey
NTA: Negotiated Testing Agreement
NTE: Not to Exceed
NTIS: National Technical Information Service
NTN: National Trends Network
NTP: National Toxicology Program
NTSP: National Transportation Safety Board
NURF: NAPA Utility Reference File
NVPP: National Vehicle Population Poll
NWA: National Water Alliance
NWF: National Wildlife Federation
NWPA: Nuclear Waste Policy Act
NWRC: National Weather Records Center
NWS: National Weather Service (NOAA)

O

O_x: Total Oxidants
OASDI: Old Age and Survivor Insurance
OC: Object Class
OCD: Offshore and Coastal Dispersion Model
OCI: Organizational Conflicts of Interest
OCR: Optical Character Reader
OCS: Outer Continental Shelf
OCSLA: Outer Continental Shelf Lands Act
OD: Organizational Development
OD: Outside Diameter
OF: Optional Form
O&G: Oil and Gas
O&M: Operations and Maintenance
OMB: Office of Management and Budget
OP: Operating Plan
OPAC: Overall Performance Appraisal Certification
OPF: Official Personnel Folder
ORM: Other Regulated Material
ORNL: Oak Ridge National Laboratory
ORP: Oxidation-Reduction Potential
ORV: Off-road Vehicle
OSC: On-Scene Coordinator
OSHA: Occupational Safety and Health Act
OSHA: Occupational Safety and Health Administration (DOL)
OSM: Office of Surface Mining (DOI)
OSTP: Office of Science and Technology Policy (White House)
OS/VS: Operating System/Virtual Storage
OT: Overtime
OTA: Office of Technology Assessment (US Congress)
OY: Operating Year
OYG: Operating Year Guidance
OZIPP: Ozone Isopleth Plotting Package
OZIPPM: Modified Ozone Isopleth Plotting Package

P

PA: Policy Analyst
PA: Preliminary Assessment
P&A: Precision and Accuracy
PAA: Priority Abatement Areas
PADRE: Particle Analysis and Data Reduction Program
PAGM: Permit Applications Guidance Manual
PAH: Polycyclic Aromatic Hydrocarbon
PAHO: Pan American Health Organization
PAI: Performance Audit Inspection (CWA)
PAIR: Preliminary Assessment Information Rule
PAL: Point, Area, and Line Source Air Quality Mode
PALDS: PAL Model with Deposition and Settling of Pollutants PAN: Peroxyacetyl Nitrate
PAPR: Powered Air Purifying Respirator
PARS: Precision and Accuracy Reporting System
PASS: Procurement Automated Source System
PAT: Permit Assistance Team (RCRA)
PBB: Polybromated Biphenyls
PBL: Planetary Boundary Layer
PBLSQ: The Lead Line Source Model
PC: Personal Computer
PC: Planned Commitment
PC: Position Classification
PC: Pulverized Coal
PCA: Principle Component Analysis
PCB: Polychlorinated Biphenyls
PC&B: Personnel Compensation and Benefits
PCDD: Polychlorinated Dibenzodioxin
PCDF: Polychlorinated Dibendzofuran
PCE: Pollution Control Equipment
PCIE: President's Council on Integrity and Efficiency in Government
pCi/l: Picocuries Per Litre
PCIOS: Processor Common Input/Output System
PCM: Phase Contrast Microscopy
PCO: Printing Control Officer
PCON: Potential Contractor
PCP: Pentachlorophenyl
PCS: Permanent Change of Station
PCS: Permit Compliance System (CWA)
PCSC: PC Site Coordinator
PCV: Positive Crankcase Ventilation
PD: Position Description
PD: Position Document
PD: Project Description
PDFID: Preconstruction Direct Flame Ionization Detection
PDMS: Pesticide Document Management System (OPP)
PDR: Particulate Data Reduction
PE: Program Element
PEL: Permissible Exposure Limit
PEL: Personal Exposure Limit
PEM: Partial Equilibrium Multimarket Model
PEM: Personal Exposure Model
PEPE: Prolonged Elevated Pollution Episode
PESTAN: Pesticides Analytical Transport Solution
PF: Potency Factor
PF: Protection Factor
PFT: Permanent Full Time
PFTE: Permanent Full-Time Equivalent
PHC: Principal Hazardous Constituent
PHS: (US) Public Health Service
PHSA: Public Health Service Act
PI: Preliminary Injunction
PI: Program Information
PIC: Products of Incomplete Combustion
PIC: Public Information Center
PIGS: Pesticides in Groundwater Strategy
PIN: Procurement Information Notice
PIP: Public Involvement Program
PIPQUIC: Program Integration Project Queries Used in Interactive Command
PIRG: Public Interest Research Group
PIRT: Pretreatment Implementation Review Task Force
PIS: Public Information Specialist
PITS: Project Information Tracking System (OTS)
PLIRRA: Pollution Liability Insurance and Risk Retention Act
PLM: Polarized Light Microscopy
PLUVUE: Plume Visibility Model
PM: Particulate Matter
PM: Program Manager
PM10: Particulate Matter (nominally 10m and less)
PM15: Particulate Matter (nominally 15m and less)
PMEL: Pacific Marine Environmental Laboratory
PMIP: Presidential Management Intern Program
PMIS: Personnel Management Information System (OARM)
PMN: Premanufacture Notification (TSCA)
PMNF: Premanufacture Notification Form
PMR: Pollutant Mass Rate
PMRS: Performance Management and Recognition System (OARM) PMS: Program Management System
PMS: Personnel Management Specialist
PNA: Polynuclear Aromatic Hydrocarbons
PO: Project Officer
PO: Purchase Order
POC: Point of Compliance
POC: Program Office Contacts
POE: Point of Exposure
POGO: Privately-Owned/Government-Operated
POHC: Principal Organic Hazardous Constituent
POI: Point of Interception
POLREP: Pollution Report
POM: Particulate Organic Matter
POM: Polycyclic Organic Matter

POTW: Publicly Owned Treatment Works
POV: Privately Owned Vehicle
PP: Pay Period
PP: Program Planning
PPA: Pesticide Producers Association
PPA: Planned Program Accomplishment
ppb: Parts Per Billion
PPC: Personal Protective Clothing
PPE: Personal Protective Equipment
PPIS: Pesticide Product Information System
ppm: Parts Per Million
PPMAP: Power Planning Modeling Application Procedure
PPSP: Power Plant Siting Program
PPT: Permanent Part Time
ppt: Parts Per Trillion
ppth: Parts Per Thousand
PR: Preliminary Review
PR: Procurement Request
PRA: Paperwork Reduction Act
PRA: Planned Regulatory Action
PRM: Prevention Reference Manuals
PRP: Potentially Responsible Party (CERCLA)
PS: Point Source
PSAM: Point Source Ambient Monitoring
PSD: Prevention of Significant Deterioration
PSE: Program Subelement
PSES: Pretreatment Standards for Existing Sources
PSI: Pollutant Standards Index
PSI: Pounds Per Square Inch (Pressure)
PSI: Pressure Per Square Inch
PSIG: Pressure Per Square Inch Gauge
PSM: Point Source Monitoring
PSNS: Pretreatment Standards for New Sources
PSP: Payroll Savings Plan
PSS: Personnel Staffing Specialist
PSTN: Pesticide Safety Team Network
PT: Part Time
PTDIS: Single Stack Meteorological Model in EPA UNAMAP Series
PTE: Potential to Emit
PTFE: Polytetrafluoroethylene (Teflon)
PTMAX: Single Stack Meteorlogical Model in EPA UNAMAP series
PTPLU: Point Source Gaussian Diffusion Model
PUC: Public Utility Commission
PV: Project Verification
PVC: Polyvinyl Chloride
PWS: Public Water Supply
PWS: Public Water System (SDWA)
PWSS: Public Water Supply System (SDWA)
PY: Prior Year

Q

QA: Quality Assurance
QAC: Quality Assurance Coordinator
QA/QC: Quality Assistance/Quality Control
QAMIS: Quality Assurance Management and Information System
QAO: Quality Assurance Officer
QAPP: Quality Assurance Program (or Project) Plan
qBtu: Quadrillion British Thermal Units
QC: Quality Control
QCA: Quiet Communities Act
QCI: Quality Control Index
QCP: Quiet Community Program
QNCR: Quarterly Noncompliance Report
QCP: Quiet Community Program
QSI: Quality Step Increase

R

RA: Reasonable Alternative
RA: Regional Administrator
RA: Regulatory Alternatives
RA: Regulatory Analysis
RA: Remedial Action
RA: Resource Allocation
RA: Risk Analysis
RA: Risk Assessment
RAATS: RCRA Administrative Action Tracking System
RAC: Radiation Advisory Committee
RAC: Regional Asbestos Coordinator
RAC: Response Action Coordinator
RACM: Reasonably Available Control Measures
RACT: Reasonably Available Control Technology
RAD: Radiation Adsorbed Dose (unit of measurement of radiation adsorbed by humans)
RADM: Random Walk Advection and Dispersion Model
RADM: Regional Acid Deposition Model
RAM: Urban Air Quality Model for Point and Area Source in EPA UNAMAP Series
RAMP: Rural Abandoned Mine Program
RAMS: Regional Air Monitoring System
RAP: Radon Action Program
RAP: Remedial Accomplishment Plan
RAP: Response Action Plan
RAPS: Regional Air Pollution Study
RARG: Regulatory Analysis Review Group
RAS: Routine Analytical Service
RAT: Relative Accuracy Test
RB: Red Border
RBC: Red Blood Cells
RC: Regional Counsel
RC: Responsibility Center
RCC: Radiation Coordinating Council
RCDO: Regional Case Development Officer
RCP: Research Centers Program
RCRA: Resource Conservation and Recovery Act
RCRIS: Resource Conservation and Recovery Information System
RD: Remedial Design (CERCLA)
R&D: Research and Development
RD&D: Research, Development and Demonstration
RDF: Refuse-Derived Fuel
rDNA: Recombinant DNA
RDU: Regional Decision Units
RE: Reasonable Efforts
RE: Reportable Event
REAP: Regional Enforcement Activities Plan
REE: Rare Earth Elements
REEP: Review of Environmental Effects of Pollutants
REF: Reference
REM: Roentgen Equivalent, Man
REM/FIT: Remedial/Field Investigation Team
REMS: RCRA Enforcement Management System
REP: Reasonable Efforts Program
REPS: Regional Emissions Projection System
RESOLVE: Center for Environmental Conflict Resolution
RF: Radio Frequency
RF: Response Factor
RFA: Regulatory Flexibility Act
RFB: Request for Bid
RFD: Reference Dose Values
RFI: Remedial Field Investigation
RFP: Reasonable Further Programs
RI: Reconnaissance Inspection (CWA)
RI: Remedial Investigation
RIA: Regulatory Impact Analysis
RIA: Regulatory Impact Assessment
RIC: Radon Information Center
RIC: RTP Information Center
RICC: Retirement Information and Counseling Center
RICO: Racketeer Influenced and Corrupt Organizations Act
RI/FS: Remedial Information/Feasibility Study
RIM: Regulatory Interpretation Memorandum
RIN: Regulatory Identifier Number
RIP: RCRA Implementation Plan
RISC: Regulatory Information Service Center (OMB)
RJE: Remote Job Entry
RLL: Rapid and Large Leakage (Rate)
RMCL: Recommended Maximum Contaminant Level (this phrase is being discontinued in favor of MCLG)
RMDHS: Regional Model Data Handling System
RMIS: Resources Management Information System
RMO: Records Management Officer
RMP: Revolutions Per Minute
RNA: Ribonucleic Acid
RO: Regional Office
ROADCHEM: Roadway Version that Includes Chemical Reactions of BI, NO_2, and O_3
ROADWAY: A Model to Predict Pollutant Concentrations Near a: Roadway
ROC: Record of Communication
ROD: Record of Decision (CERCLA)
ROG: Reactive Organic Gases
ROLLBACK: A Proportional Reduction Model
ROM: Regional Oxidant Model
ROMCOE: Rocky Mountain Center on the Environment
ROP: Regional Oversight Policy
ROPA: Record of Procurement Action
RP: Respirable Particulates
RP: Responsible Party
RPAR: Rebuttable Presumption Against Registration (FIFRA)
RPM: Reactive Plume Model
RPM: Remedial Project Manager (CERCLA)
RPM: Revolutions Per Minute
RPO: Regional Planning Officer
RPO: Regional Program Officer
RQ: Reportable Quantities
RRC: Regional Response Center
RRT: Regional Response Team
RRT: Requisite Remedial Technology
RSCC: Regional Sample Control Center
RSKERL: Robert S. Kerr Environmental Research Laboratory
RT: Regional Total
RTCM: Reasonable Transportation Control Measure
RTD: Return to Duty
RTDM: Rough Terrain Diffusion Model
RTECS: Registry of Toxic Effects of Chemical Substances
RTM: Regional Transport Model
RTP: Research Triangle Park
RUP: Restricted Use Pesticide (FIFRA)
RVP: Reid Vapor Pressure
RWC: Residential Wood Combustion

S

SA: Special Assistant
SA: Sunshine Act
S&A: Sampling and Analysis
S&A: Surveillance and Analysis
SAB: Science Advisory Board (AO)
SAC: Secretarial Advisory Board
SAC: Suspended and Cancelled Pesticides (FIFRA)
SADAA: Science Assistant to the Deputy Administrator
SAEWG: Standing Air Emissions Work Group

SAIC: Special-Agents-In-Charge (NEIC)
SAIP: Systems Acquisition and Implementation Program
SAMWG: Standing Air Monitoring Work Group
SANE: Sulfur and Nitrogen Emissions
SANSS: Structure and Nomenclature Search System
SAP: Scientific Advisory Panel
SAR: Start Action Request
SAR: Structural Activity Relationship (of a qualitative assessment)
SARA: Superfund Amendments and Reauthorization Act of 1986
SAROAD: Storage and Retrieval of Aerometric Data
SAS: Special Analytical Service
SAS: Statistical Analysis System
SASS: Source Assesement Sampling System
SBA: Small Business Act
SBA: Small Business Administration
SBO: Small Business Ombudsman
SC: Sierra Club
SC: Steering Committee
SCAP: Superfund Consolidated Accomplishments Plan (CERCLA)
SCAC: Support Careers Advisory Committee
SCBA: Self-Contained Breathing Apparatus
SCC: Source Classification Code
SCFM: Standard Cubic Feet Per Minute
SCLDF: Sierra Club Legal Defense Fund
SCORPIO: Subject Content-Oriented Retriever for Processing Information On-Line
SCR: Selective Catalytic Reduction
SCRAM: State Consolidated RCRA Authorization Manual
SCRC: Superfund Community Relations Coordinator
SCS: Soil Conservation Service
SCS: Supplementary Control Strategy
SCS: Supplementary Control System
SCSA: Soil Conservation Society of America
SCSP: Storm and Combined Sewer Program
SCW: Supercritical Water Oxidation
SD: Standard Deviation
SDBE: Small Disadvantaged Business Enterprise
SDC: Systems Decision Plan
SDWA: Safe Drinking Water Act
S&E: Salaries and Expensses
SEA: State Enforcement Agreement
SEA: State/EPA Agreement
SEAM: Surface, Environment, and Mining
SEAS: Strategic Environmental Assessment System
SEE: Senior Environmental Employee
SEIA: Socioeconomic Impact Analysis
SEM: Scanning Electronic Microscope
SEM: Standard Error of the Means
SEPWC: Senate Environment and Public Works Committee
SERC: State Emergency Planning Commission
SES: Secondary Emissions Standard
SES: Senior Executive Service
SES: Socioeconomic Status
SETS: Site Enforcement Tracking System
SF: Standard Form
SF: Superfund
SFA: Spectral Flame Analyzers
SFFAS: Superfund Financial Assessment Systerm
SFIREG: State FIFRA Issues Research and Evaluation Group
SHORTZ: Short Term Terrain Model
SHWL: Seasonal High Water Level
SI: International System of Units
SI: Spark Ignition
SIC: Standard Industrial Classification
SICEA: Steel Industry Compliance Extension Act
SIMS: Secondary Ion-Mass Spectometry
SIP: State Implementation Plan (CAA)
SIS: Stay In School
SITE: Superfund Innovative Technology Evaluation
SL: Sick Leave
SLAMS: State/Local Air Monitoring Station
SLSM: Simple Line Source Model
SMCRA: Surface Mining Control and Reclamation Act:
SME: Subject Matter Expert
SMO: Sample Management Office
SMSA: Standard Metropolitan Statistical Area
SNA: System Network Architecture
SNAAQS: Secondary National Ambient Air Quality Standards
SNAP: Significant Noncompliance Action Program
SNARL: Suggested No Adverse Response Level
SNC: Signficant Noncompliers
SNUR: Significant New Use Rule (TSCA)
SOC: Synthetic Organic Chemicals
SOCMI: Synthetic Organic Chemicals Manufacturing Industry
SOP: Standard Operating Procedure
SOTDAT: Source Test Data
SOW: Scope of Work
SPAR: Status of Permit Application Report
SPCC: Spill Prevention, Containment, and Countermeasure (CWA)
SPE: Secondary Particulate Emissions
SPECS: Specifications
SPF: Structured Programming Facility
SPI: Strategic Planning Initiative
SPLMD: Soil-pore Liquid Monitoring Device
SPMS: Special Purpose Monitoring Stations
SPMS: Strategic Planning and Management System
SPOC: Single Point of Contact
SPS: State Permit System
SPSS: Statistical Package for the Social Sciences
SPUR: Software Package for Unique Reports
SQBE: Small Quantity Burner Exemption
SQG: Small Quantity Generator
SRAP: Superfund Remedial Accomplishment Plan
SRC: Solvent-Refined Coal
SRM: Standard Reference Method
SS: Settleable Solids
SS: Superfund Surcharge
SSA: Sole Source Aquifer
SSAC: Soil Site Assimulated Capacity
SSC: State Superfund Contracts: (OSWER)
SSD: Standards Support Document
SSEIS: Standard Support and Environmental Impact Statement
SSEIS: Stationary Source Emissions and Inventory System
SSI: Size Selective Inlet
SSMS: Spark Source Mass Spectrometry
SSN: Social Security Number
SSO: Source Selection Official
SST: Supersonic Transport
SSURO: Stop Sale, Use and Removal Order (FIFRA)
STAPPA: State and Territorial Air Pollution Program Administrators
STALAPCO: State and Local Air Pollution Control Officials
STAR: Stability Wind Rose
STAR: State Acid Rain Projects
S/TCAC: Scientific/Technical Careers Advisory Committee
STEL: Short-Term Exposure Limit
STEM: Scanning Transmission-Electron Microscopy
STN: Scientific and Technical Information Network
STORET: Storage and Retrieval of Water-Related Data
STP: Sewage Treatment Plant
STP: Standard Temperature and Pressure
SUP: Standard Unit of Processing
SURE: Sulfate Regional Experiment Program
SV: Sampling Visit
SW: Slow Wave
SWC: Settlement With Conditions
SWDA: Solid Waste Disposal Act
SWIE: Southern Waste Information Exchange
SWMU: Solid Waste Management Unit
SYSOP: Systems Operator

T

TA: Travel Authorization
T&A: Time and Attendance
TALMS: Tunable Atomic Line Molecular Spectroscopy
TAMS: Toxic Air Monitoring System
TAMTAC: Toxic Air Monitoring System Advisory Committee
TAP: Technical Asssistance Program
TAPDS: Toxic Air Pollutant Data System
TAPP: Time and Attendance, Payroll, and Personnel
TBT: Tributyltin
TC: Target Concentration
TC: Technical Center
TC: Toxic Concentration:
TCDD: Dioxin (Tetrachlorodibenzo-p-dioxin)
TCDF: Tetrachlorodibenzofurans
TCE: Trichloroethylene
TCLP: Total Concentrate Leachate Procedure
TCLP: Toxicity Characteristic Leachate Procedure
TCM: Transportation Control Measure
TCP: Transportation Control Plan
TCP: Trichloroethylene
TCP: Trichloropropane
TCRI: Toxic Chemical Release Inventory
TD: Toxic Dose
TDS: Total Dissolved Solids
TDY: Temporary Duty
TEAM: Total Exposure Assessment Model
TEC: Technical Evaluation Committee
TEG: Tetraethylene Glycol
TEGD: Technical Enforcement Guidance Document
TEM: Texas Episodic Model
TEM: Transmission Electron Microscopy
TEP: Technical Evaluation Panel
TES: Technical Enforcement Support
TEXIN: Texas Intersection Air Quality Model
TFT: Temporary Full Time
TFTE: Temporary Full-Time Equivalent
TGO: Total Gross Output
THC: Total Hydrocarbons
THM: Trihalomethane
TI: Temporary Intermittent
TI: Therapeutic Index
TIBL: Thermal Internal Boundary Layer
TIC: Technical Information Coordinator
TIC: Tentatively Identified Compounds
TIM: Technical Information Manager
TIP: Transportation Improvement Program
TISE: Take It Somewhere Else (Solid Waste Syndrome. See NIMBY)
TITC: Toxic Substance Control Act Interagency Testing: : Committee
TLV: Threshold Limit Value
TMI: Three Mile Island
TNT: Trinitrotoluene
TO: Task Order
TO: Travel Order
TOA: Trace Organic Analysis
TOC: Total Organic Carbon
TOC: Total Organic Compound
TOT: Time-of-Travel

TOX: Tetradichloroxylene
TPC: Testing Priorities Committee
TPI: Technical Proposal Instructions
TPQ: Threshold Planning Quantity
TPSIS: Transportation Planning Support Information System:
TPTH: Triphenyltinhydroxide
TPY: Tons Per Year
T-R: Transformer-Rectifier
TRC: Technical Review Committee
TRD: Technical Review Document
TRI: Toxic Release Inventory
TRIP: Toxic Release Inventory Program
TRLN: Triangle Research Library Network
TRO: Temporary Restraining Order
TS: Toxic Substances
TSA: Technical Systems Audit
TSCA: Toxic Substances Control Act
TSCATS: TSCA Test Submissions Database (OTS)
TSCC: Toxic Substances Coordinating Committee
TSD: Technical Support Document
TSDF: Treatment, Storage, and Disposal Facility (OTS)
TSDG: Toxic Substances Dialogue Group
TSM: Transportation System Management
TSO: Time Sharing Option
TSP: Teleprocessing Services Program
TSP: Thrift Savings Plan
TSP: Total Suspended Particulates
TSS: Terminal Security System
TSS: Total Suspended (non-filterable) Solids
TTFA: Target Transformation Factor Analysis
TTHM: Total Trihalomethane
TTO: Total Toxic Organics
TTY: Teletypewriter
TVA: Tennessee Valley Authority
TWA: Time Weighted Authority:
TZ: Treatment Zone

U

UAC: User Advisory Committee
UAM: Urban Airshed Model
UAPSP: Utility Acid Precipitation Study Program
UAQI: Uniform Air Quality Index
UARG: Utility Air Regulatory Group
UCC: Ultra Clean Coal
UCL: Upper Control Limit
UDMH: Unsymmetrical Dimethyl Hydrazine
UEL: Upper Explosive Limit
UFL: Upper Flammability Limit
UIC: Underground Injection Control
UL: Underwriters' Laboratories
ULP: Unfair Labor Practices
UMTA: Urban Mass Transportation Administration
UMTRCA: Uranium Mill Tailings Radiation Control Act
UN: United Nations
UNAMAP: Users' Newtork for Applied Modeling of Air Pollution
UNEP: United Nations Environment Program
UNESCO: United Nations Educational, Scientific and Cultural: Organization
UNIDO: United Nations Industrial Development Organization
USAO: United States Attorney's Office
USBM: United States Bureau of Mines
USC: Unified Soil Classification
USC: United States Code
USCA: United States Code Annotated
USDA: United States Department of Agriculture
USDOI: United States Department of the Interior
USDW: Underground Sources of Drinking Water
USEPA: United States Environmental Protection Agency
USFS: United States Forest Service
USGS: United States Geological Survey
USNRC: United States Nuclear Regulatory Commission
USPHS: United States Public Health Service
USPS: United States Postal Service
UST: Underground Storage Tank
UTM: Universal Transverse Mercator:
UTP: Urban Transportation Planning:
UV: Ultraviolet
UZM: Unsaturated Zone Monitoring

V

VA: Veterans Administration
VALLEY: Meteorological Model to Calculate Concentrations : : on Elevated Terrain
VCM: Vinyl Chloride Monomer
VE: Visual Emissions:
VEO: Visible Emission Observation
VHS: Vertical and Horizontal Spread Model
VHT: Vehicle-Hours of Travel
VISTTA: Visibility Impairment from Sulfur Transformation : : and Transport in the Atmosphere
VKT: Vehicle Kilometers Traveled
VMT: Vehicle Miles Traveled
VOC: Volatile Organic Compounds
VOS: Vehicle Operating Survey
VOST: Volatile Organic Sampling Train
VP: Vapor Pressure
VSD: Virtually Safe Dose
VSI: Visual Site Inspection
VSS: Volatile Suspended Solids

W

WA: Work Assignment
WADTF: Western Atmospheric Deposition Task Force
WAP: Waste Analysis Plan (RCRA)
WB: Wet Bulb
WB: World Bank
WBC: White Blood Cells
WBE: Women's Business Enterprise
WCED: World Commissin on Environment and Development
WDROP: Distribution Register of Organic Pollutants in Water
WENDB: Water Enforcement National Data Base
WERL: Water Engineering Research Laboratory
WG: Wage Grade
WG: Work Group
WGI: Within Grade Increase
WHO: World Health Organization
WHWT: Water and Hazardous Waste Team
WIC: Washington Information Center
WICEM: World Industry Conference on Environmental Management
WISE: Women In Science and Engineering
WL: Warning Letter
WL: Working Level (radon measurement)
WLA/TMDL: Waste Load Allocation/Total Maximum Daily Load
WLM: Working Level Months:
WMO: World Meteorological Organization
WPCF: Water Pollution Control Federation
WRC: Water Resources Council
WRDA: Water Resources Development Act
WRI: World Resources Institute
WS: Work Status
WSF: Water Soluble Fraction
WSRA: Wild and Scenic Rivers Act
WSTB: Water Sciences and Technology Board
WSTP: Wastewater Sewage Treatment Plant
WWEMA: Waste and Wastewater Equipment Manufacturers' Association
WWF: World Wildlife Fund
WWTP: Wastewater Treatment Plant

Y-Z

YTD: Year to Date
ZBB: Zero Base Budgeting
ZHE: Zero Headspace Extractor
ZOI: Zone of Incorporation
ZRL: Zero Risk Level